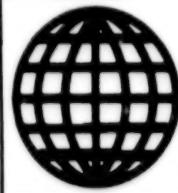


JPRS-TTP-92-003  
10 MARCH 1992



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# ***JPRS Report—***

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## **Telecommunications**

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# Telecommunications

JPRS-TTP-92-003

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10 March 1992

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### France Provides Funds for Telecommunications in Cameroon

92WT0112A Yaounde CAMEROON TRIBUNE  
in French 15-16 Dec 91 p 5

[Article by Thomas Ouatedem: "French Loans and Grants Worth 5.75 Billion"]

[Excerpts] The minister of planning and regional development, Mr. Tchouta Moussa, and the director of the Central Fund for Economic Cooperation, Mr. Dominique Dordain, signed agreements last Friday under which France will grant Cameroon two loans and two gifts totaling 5.75 billion CFA [African Financial Community] francs. [passage omitted]

The first 3.5-billion agreement will enable the government to invest in telecommunications, while the second, which is worth 2.25 billion, will be used for hydraulic needs. [passage omitted]

### Expanding Telecommunications Networks

The agreement is France's way of helping finance the Cameroonian Government's program to expand the telecommunications networks of 19 provincial localities and to increase long-distance telephone links. The government has been implementing the three-part program since 1985. The first goal is to complete the installation of telephone-cable networks in the towns of Bafang, Bafia, Bangangte, Batouri, Bertoua, Dschang, Ebolowa, Foumban, Guider, Kousseri, Kumbo, Maroua, Mbouda, Meiganga, Mokolo, Ngaoundere, Sangmelima, Yabassi, and Yagoua. The Central Fund for Economic Cooperation already contributed substantially to funding this effort in 1988.

The second part of the program is the construction by Bana of a digital microwave link between Douala and Yaounde, to insure the security of Edea's direct link. The third goal is to continue efforts to end the isolation of rural areas. [passage omitted]

### Chile Signs Communications, Mailing Agreement With Tunisia

PY2602123692 Santiago Radio Chilena Network  
in Spanish 1000 GMT 26 Feb 92

[Summary] Chile and Tunisia have signed a cooperation agreement in the communications and mail service field. This agreement is complementary to the technical and cultural cooperation treaty signed in 1968. It was signed by Noureddine Mejdoub, the Tunisian secretary of state for foreign affairs, and Chilean Ambassador Marcial Covarrubias.

### Kuwait Offers To Invest in India in 'Big Way'

BK2002090892 Delhi All India Radio Network  
in English 0730 GMT 20 Feb 92

[Text] Kuwait has offered to invest in India in a big way. The Kuwaiti communications minister, Habib Jawhar Hayat, told a press conference in New Delhi today that right now his country has awarded contracts worth \$20

million to the Telecommunications Consultants India Limited. The job involves maintenance, equipment supply, and training of Kuwaiti personnel in the communication network. He said his country is willing to consider investing in India in the telecommunications and other fields. Mr. Hayat said that the agreement signed in New Delhi yesterday and the visit of the external affairs minister, Mr. Madhavsinh Solanki, to Kuwait recently are indications of continuing relationship between the two countries as existed before the Gulf war.

Replies to questions, Mr. Hayat demanded that Iraq should immediately release about 1,200 Kuwait prisoners of war as per the UN resolution.

Mr. Hayat said that most of the Indian workers have returned to Kuwait and identity cards will be issued to all nationals soon. He also disclosed that Kuwait will go for general elections in October to elect a new parliament and the National Assembly has not yet decided on giving voting right to women.

### Japan Grants Loan to Kenya for New Transmitters

E42002184992 Nairobi KNA in English 1753 GMT  
18 Feb 92

[Excerpt] Nairobi, 18 Feb (KNA)—The government has acquired a 2.38 billion Kenyan shillings loan from Japan to modernize, upgrade and establish new five KBC [Kenya Broadcasting Corporation] transmitter stations, the Minister for Information and Broadcasting Mr. Burudi Nabwera has disclosed.

He said the loan is granted a 10-year grace period and will be repaid at the rate of two and half percent interest. The minister, who was commissioning a 10 kilowatt television transmitter facility at Limuru today, said it was the priority of the government to ensure that all corners of the Republic receive radio and tv broadcasts without hindrance. The transmitters are planned for Nyeri [north of Nairobi], Timboro [in Rift Valley], Nyambeni [eastern Kenya] and Mazeras [near Mombasa].

Mr. Nabwera directed the Kenya Broadcasting Corporation management to deal directly with advertisers instead of relying [on] middlemen who he said were exploiting the corporation. [passage omitted]

### Korea Grants Loan to Uganda for Digital Phone Lines

92WT0115A Kampala THE NEW VISION in English  
6 Jan 92 p 3

[Article by Robert Opio: "Telecoms Project Sealed"]

[Text] The Second Deputy Prime Minister and Minister of Foreign Affairs, Mr. Paul Ssemogerere, and the

Ambassador of the Republic of Korea, Mr. Jae Kyu Kim, have exchanged notes on behalf of their governments in respect of a 7.5 million US dollar soft loan which Korea is extending to Uganda for the rehabilitation of telecommunications.

Mr. Ssemogerere said the project to be financed will focus on installation of 8,760 digital telephone lines including provision of technical and personnel training.

The loan carries an interest rate of 2.5 percent and is repayable in 25 years including a grace period of seven years.

In his reply, Mr. Kyu Kim said the loan would be used for the regional telephone network expansion project in

northern and eastern Uganda, Luwero, Hoima, Masindi and Wobulenzi in Central Uganda.

Ambassador Kim said the Korean Government was providing the loan with a view to supporting Uganda's economic development efforts and promoting economic cooperation between the two countries.

The signing of agreement took place at the Minister's office at Parliamentary Building in Kampala.

Present at the signing ceremony was the Commissioner of aid co-ordination in the Ministry of Finance, Mr. I. Byamugisha and the Acting Director of the Asia Department in the Ministry of Foreign Affairs, Mr. Godfrey Kalimugogo and senior officials from the same ministry.

## REGIONAL AFFAIRS

### Libreville To Be PANA Relay Station

92WT0099A Libreville *L'UNION* in French 12 Dec 91  
p 7

[Article by Ndong d'Akomayo: "Telecommunications: Libreville To House a PANA Relay Station; It Will Be Managed by the GABONESE PRESS AGENCY"]

[Text] The relay station of the PAN-AFRICAN NEWS AGENCY (PANA) for Central Africa will be located in Libreville. It will be managed by the GABONESE PRESS AGENCY (AGP). This decision, recently made in Dakar (Senegal), was dictated by the reliability of our country's telecommunication network, which provides good connections to Congo, Cameroon, the Central African Republic, and other West African States, in particular Benin, Senegal, the Ivory Coast, and Togo.

In Central Africa, the Kinshasa Pool had been considered first, but it is still not working properly, according to sources close to PANA management. The main reason is said to be the condition of the Zairian telecommunication network, Kinshasa being completely isolated from Dakar and the capitals of all Central African States. Hence the need to find a palliative pending the improvement of the Zairian network and the end of the current isolation of the Kinshasa Pool.

In Libreville, the PANA relay station will involve installing a computer at the press agency. It will be connected to the BENIN PRESS AGENCY (ABP) in Cotonou through a dedicated duplex point-to-point line, the ABP being itself connected to Lagos (Nigeria). A permanent Lagos-Dakar link has been operating since 1986; it will route the news to the central headquarters, and vice versa.

The mission of the PANA relay center in Libreville will be to receive and forward to Lagos, via Cotonou, the news gathered by telex from the press agencies of Central African countries and, conversely, to receive the news from the continent published by the PANA's editorial offices.

There is every indication that the AGP stands to gain most by this operation, in that the Libreville-Cotonou link will give priority to its news and guarantee them optimum reception of the PANA service as a whole, and improved distribution to the Gabonese media.

As far as operating expenses are concerned, all the equipment (computer, spare parts, etc.) will be provided by the PANA, which will take care of purchasing, installation, service, and maintenance. All other expenses incurred by the AGP will be reimbursed by the PANA, based on the voucher system. However, the Libreville-Cotonou dedicated line belongs to our country, which is financing its operation.

## GABON

### Telecommunications Budgets Discussed

92WT0100A Libreville *L'UNION* in French 10 Dec 91  
p 7

[Article by M.L. Ntsame: "Gabonese International Telecommunications Company Management Committee: Increased Telephone and Data Communication Traffic"]

[Excerpt] TIG [Gabonese International Telecommunications Company] management recently held a meeting in the board room located on the fifth floor of the Postal Delta (headquarters of the OPT [Postal and Telecommunications Office], Agondje); the meeting was chaired by Mr. Luc Jean Pierre Mvoula, the new chairman of the TIG management committee, and by two representatives of France-Cables and Radio (40-percent shareholder), Messrs. Lancesseur and Vaillant. The 1990 corporate accounts, the 1991 budget, and the 1992 projected budget, the projected operating results, and the financing schedule (1992-93 and 1994) were thus examined.

The 1992 projected budget was voted, with revenues and expenditures set at close to 7 billion CFA [African Financial Community] francs, as follows: 128,250,000 for current investments; 896,415,183 for miscellaneous investments, and 5,719,245,000 for operating expenditures. The budget shows a 6-percent increase in telephone traffic, and a 10-percent decrease for telex, to the benefit of telefax and data-communication and teleprocessing services (+ 48 percent for the Gabonpac traffic and the traffic that goes through the Comtel gateway; and 87 percent for equipment leasing: minitel, printers, modems). The 1990 corporate accounts show an after-tax profit of 190,567,337 CFA francs, which will be allocated to the results-bonus fund of TIG personnel (88,387,673 CFA francs) and to the dividend fund (102,179,664 CFA francs).

### Increased Datacom Services

The provisional operating results for 1992-94 project increases in data-communication and teleprocessing services (Gabonpac, Comtel). These increases are essentially based on changes in the cost of equipment and services, especially the extension of the telephone network contemplated by the OTP, an attractive tariff policy (off-peak tariff, etc.) and the development of new value-added services. [passage omitted]

## IVORY COAST

### Digital Opens Regional Office in Abidjan

92WT0113A Abidjan *FRATERNITE MATIN* in French 16 Jan 92 p 7

[Article by Adama Diabete: "Digital Sets Up Shop in Ivory Coast"]

[Excerpt] The world's second-largest computer manufacturer, Digital, has just opened up a branch office in

Abidjan. It is Digital's first branch office in sub-Saharan Africa and will serve the entire French-speaking African region, in particular Cameroon, Gabon, Senegal, Niger, Togo, and Burkina Faso.

A huge cocktail and dinner party to celebrate the opening of the branch was held last Tuesday in the Hotel Ivory's Palais des Congres Hall.

Mr. Didier Halgand, the director for Africa, told his hundreds of guests that "the office is a practical expression of Digital's long-term commitment to Africa. Indeed, Digital is not just seeking sales, but the chance to provide these [African] countries with the technological means to develop themselves."

A whole team of Ivorian engineers will be working with Digital's Ivory Coast director, Vincent Schoen. They are ready to support the country's many public- and private-sector projects and to maintain Digital's machines throughout the subregion of French-speaking West Africa. They currently number eight, a figure that will rise to 11 in a few months, and probably to 15 or 20 by next year. The offices of Ivory Coast Digital are located in Plateau, on the lagoon front.

From 1987 until last February, OMNITEC of the West African Trading Group (SCOA) distributed Digital's products in Ivory Coast. SCOA's decision to split off from its computer branch in Africa led Digital to assume direct control of all contracts for its hardware last March. Today the company offers its products and services, notably products that run on UNIX. [passage omitted]

#### **Yamoussoukro Becomes Communications Hub**

*92WT0101A Abidjan FRATERNITE MATIN in French  
11 Dec 91 p 6*

[Article by Youssouf Sylla: "Telecommunications: A New Complex in Yamoussoukro; Capacity: 13,500 Lines"—first two paragraphs are FRATERNITE MATIN introduction]

[Text] With the setting into service of the Assabou telecommunication complex, Yamoussoukro, the political capital of the Ivory Coast, has become a central and essential hub for all radio-relay, fiber-optic, and satellite communication links of the Ivorian national telecommunication network.

This is the successful conclusion of a telephone network extension and modernization project initiated 34 months ago, at a total cost of about 10 billion CFA [African Financial Community] francs, entirely financed by CI-TELCOM [Ivory Coast Telecommunications].

Through the brand-new Assabou telecommunication complex over 90 percent of the telephone, telegraph, telex, telefax, and television communications will transit from Abidjan to the inland and to some neighboring countries, such as Mali and Burkina Faso, and conversely. At 1150 last Monday, Mr. Vincent Bandama N'Guetta, prefect of Yamoussoukro and of the central region, symbolically initiated the network.

This was repeated by the mayor of Yamoussoukro, Mr. Jean Konan Banny, and by the chief executive officer of CI-TELCOM, Mr. Leon Aka Bonny, respectively. The first subscriber on line was Mr. Nicolas Kouassi Akon, minister of post and telecommunications. Honor to whom honor is due. Words of congratulation, pride, and encouragement for this reliable and efficient tool.

After a series of visits to the premises and technical facilities, especially the regional directorate, Kokrenou, N'Zuessy, the INSET [National Higher Institute for Technical Education], and Assabou, the CI-TELCOM chief executive officer, speaking on behalf of the supervising minister, who was unable to attend, explained the meaning of the ceremony and presented the complex. The Yamoussoukro integrated telecommunication project, he then commented, hinges on an E10/MT-type electronic time-switched automatic branch exchange having an overall capacity of 13,500 lines, with a core network of 4,000 lines in downtown Yamoussoukro.

To this core network are connected 11 remote digital satellite exchanges representing a total of 9,500 lines. The downtown satellite exchange is connected to the other satellite exchanges inside Yamoussoukro (Assabou: 3,000 lines; INSET, Kokrenou, and N'Zuessy: 1,000 lines each) through fiber optic cables, and to the satellite exchanges outside Yamoussoukro (Bouafle, Didievi, Oume, Sinfra, Tiebissou, Toumodi, and Zuenoula: 500 lines each) through digital radio-relay links.

The entire Yamoussoukro telecommunications complex, Mr. Aka Bonny added, is connected mostly to the rest of the national network through the largest fiber optic toll link ever built in Africa, connecting Yamoussoukro to Bouake on the one hand, and to Abidjan on the other hand. It goes from Bouake through Tiebissou, Yamoussoukro, Toumodi, N'Douci-Tiassale, Abobo, and Abidjan, i.e., a total of 423 km.

In addition, to provide routing diversity and communications security, radio-relay systems and a domestic satellite link between Yamoussoukro and Abidjan are also used.

The link inaugurated can route up to 7,690 simultaneous telephone calls, or 16 simultaneous television programs. CI-TELCOM's objective is to endow the country with a modern large-capacity network of enhanced quality and entirely digital by the year 2000.

#### **SOUTH AFRICA**

##### **Telkom Head Discusses Industry's Reorganization**

*92WT0104A Johannesburg ENGINEERING NEWS  
in English 1 Nov 91 pp 1A-2A*

[Interview with Danie du Toit, managing director of Telkom, by David McKay; place and date not given—first paragraph ENGINEERING NEWS introduction]

[Text] The commercialisation of the South African Post and Telecommunications (SAPT) on October 1, 1991, into Telkom and the South African Post Office (SAPO)

has raised a host of fundamental questions concerning the role of government vis-a-vis industry. Certainly it brings the stranglehold government had over the telecom industry into the light. But what now should the South African public expect of Telkom? What of de-regulation? And must Telkom make profit-making its priority like any other limited company? Telkom MD Danie du Toit speaks to THE ENGINEERING NEWS on the changing profile of one of South Africa's hitherto most monopolised industrial sectors.

[McKay] What can the public expect from the new Telkom and how is it different from the telecommunications service offered by SAAPT?

[du Toit] SAAPT was a state-owned monopoly which was severely hamstrung by the fact that capital budgets were restricted in line with non-profit-making state departments.

Resultantly, many projects with projected positive returns could not be started and clients were left dissatisfied.

In the short term (about two years) clients may not perceive the change in spending to be particularly meaningful.

This is because a period of consolidation is required due in part to substantial financing costs (force losses) and the effect of changed policy in respect of strategic stockholding and depreciation.

Our clients can however expect—and indeed should demand—greater client-care and client awareness.

[McKay] With its total assets at R15.5-billion and a turnover of R8.5-billion, Telkom would be South Africa's second biggest industrial enterprise if it were listed on the JSE? How far is Telkom away from a JSE listing?

[du Toit] A JSE listing is not on our agenda; it would require a further Act of Parliament.

It is, however, conceivable that if we can achieve the yield that we have [word indistinct] in years to come, then [word indistinct] government may be tempted to capitalise on the share value.

[McKay] How will the present commercialisation prepare the ground for the eventual privatisation?

[du Toit] Turning a monopolistic bureaucracy around to a client-driven, market-orientated business is enough of a challenge for the moment.

When this is achieved we will be better able to predict the future.

[McKay] What of de-regulation and is there a chance of the South African telecommunications market being opened for all-comers?

[du Toit] The deregulatory function belongs with the remaining Department of Posts and Telecommunications.

It is my belief that due to increasing pressure for deregulation certain fields will be opened for competition. It is however a very sensitive subject since so many of our services are cross-subsidised by our corporate clients particularly.

Free competition in most areas would necessarily mean that Telkom's social responsibility will have to be waived in order to level the playing field.

[McKay] The retained net income of SAAPT, now Telkom, was R750-million from 1990 to 1991. What becomes of this surplus and will it be shown as a profit in the future?

[du Toit] Part of Telkom's net income will in future be appropriated to offset anticipated losses at the postal company by means of taxes paid and dividends declared to its shareholder.

The retained income will form part of shareholders' equity which is utilised for internal funding, for example, capital projects.

[McKay] In the past the telecommunications aspect of SAAPT formed a crutch for the postal services section. Will financial assistance continue to the new SAPO or are we in for an increase in postal tariffs?

[du Toit] We have entered into an agreement with the South African Post Office Limited (SAPO) which provides certain projected losses to be funded by Telkom in decreasing order for the next five years.

I was not privy to any tariff discussions by SAPO management, but looking realistically at South African tariffs in comparison with our trading partners it would surprise me if our tariffs can survive for much longer.

[McKay] With which South African manufacturers did SAAPT conclude special trade and manufacturing agreements and will these agreements still apply in the new Telkom era?

[du Toit] Some 12 years ago SAAPT entered into long term agreements with several local manufacturers for the supply of telecommunications equipment.

These firms include Siemens, Altech, Telephone Manufacturers of South Africa (TMSA), Plessey and Telkor.

These agreements are being honoured by Telkom until they expire around 1993/4.

[McKay] What percentage of the R9.5-billion debt of SAAPT is inherited by Telkom? And is Telkom in the market for loan finance?

[du Toit] The total debt of R9.5-billion is inherited by Telkom as the relevant funds are invested in Telkom capital projects.

Telkom is in the market for loan finance if and when the relevant finance is required.

[McKay] What is the role of Telkom in the South African telecommunications industry and how does it intend

dove-tailing with local and overseas suppliers? Will Telkom invite tenders publically? And if not, why not?

[du Toit] The role of Telkom is to manage and provide the communications needs of our clients both locally and globally.

The strength of our country's economy cannot be separated from the efficiency of its communications systems.

Telecommunications is the nerve centre of the South African economy.

Our attitude towards local suppliers will always be influenced by the national interest except where deregulation forces our hand.

Our intention is to call for tenders wherever possible.

[McKay] What technology is Telkom intending taking in the field of telecommunications and how well is the country keeping abreast of state-of-the-art telecommunications technology?

[du Toit] Our digital switching systems are of the most modern in the world and are continually upgraded to the latest specifications.

Some 60 percent of South African exchanges have been converted to electronic or digital.

[McKay] Mobile telecommunication seems poised to grow globally and yet in South Africa it is a slow starter. Why? And what is the impact of crowded transmission bands (mostly taken up by the security forces) on the growth of mobile telecommunications?

[du Toit] Mobile telecommunications started off slowly in South Africa in line with other countries but is now showing a higher growth rate.

The apparent high cost in relation to the normal telephone service in South Africa has been an inhibiting factor but as costs come down the growth is expected to accelerate.

The crowded transmission spectrum has also had an inhibiting effect, however, Telkom has been negotiating with various users for more efficient usage of the spectrum.

The planning of efficient use of the limited radio frequency spectrum will be one of the prime tasks of the regulatory body.

[McKay] What preference did SAPT give to local manufacturers and what is Telkom's attitude to preferences?

[du Toit] The preferences given to the local electronic industry varies by product and was negotiated via the State Tender Board.

SAPT willingly subscribed to the concept.

The Telkom view has not changed on this matter since we believe in a local industry and appreciate that with the volume levels in South African price competitiveness is impossible.

There are however some "local manufacturers" who source everything overseas and only minimally assemble locally.

The debate about their claim to preference is continuing.

[McKay] What liaison does Telkom have with telecommunication counterparts on the African continent? In what way can Telkom assist other African countries and vice-versa?

[du Toit] Telkom has circuits to most countries on the African continent and maintains good liaison with these countries with regard to international traffic.

Telkom has given advice and assisted with problems in the past.

Telkom can assist these countries with the planning of their networks, advice on equipment selection and training.

The company will also be able to provide high level technical advice and technical information provided these countries employ the same technology that is used by Telkom.

[McKay] What satellites are hired by Telkom at present and what role is likely to be played by telecommunications satellites in the future?

[du Toit] Telkom is a member country of Intelsat and routes 75 percent of its international traffic over three Intelsat satellites, two over the Atlantic Ocean for traffic to Europe and the Americas and one over the Indian Ocean for traffic to Europe, Australia and the East.

Satellites are ideal for point to multipoint traffic and should play an increasing role for television broadcasting, information distribution, video conferencing and mobile communications in the future.

[McKay] Could you give us your vision of what telecommunications could look like in the world and on the African continent in the future?

[du Toit] Telecommunication will become more user-driven with the client demanding and getting multi-vendor solutions from multiple suppliers.

The phenomenon of facsimile and the cellular motor-phone are examples of technologies discovered and driven to the market place by users.

This feat will be repeated in areas like EDI, 24 hour service, cordless telephones, personal communications and many others.

The digitalisation of the network and the proliferation of optical fibre into the network will result in bandwidth becoming a commodity item.

Users will be able to obtain bandwidth on demand when they need it.

The so-called intelligent network of the future, based on Asynchronous Transport Mode (ATM) switching, will make broadband ISDN a reality.

[McKay] What South African know-how do you anticipate will be exportable and does Telkom intend entering the export market?

[du Toit] We in Telkom are not only technically very strong but we have the people skills and this certainly we see as being exportable.

Many items that are in daily use have been designed by our laboratories or in partnership with suppliers.

Many of these are exported. For example, Telkor's payphone uses a coin validator which is part ours through the Magic Manni system.

[McKay] Do you anticipate that your workforce of 68,000 people will be increased or decreased and what training programmes do you have for your 265 engineers and 48 6000 [as printed] technical officers?

[du Toit] We do not intend to reduce staff except by natural attrition.

Our staff complement has remained stagnant for the last five years while our growth has averaged 6.8 percent.

This indicates a productivity improvement of about 7 percent.

Training has always been a priority with Telkom.

We have over 700 people with at least a first degree and a further 19,000 with three or more years of post matric technical education.

[McKay] Are there any other issues you would like to raise?

[du Toit] Perhaps one area not covered is our very aggressive marketing move. For example, new structures have been introduced to further our push to satisfy our clients.

## UGANDA

**Second Satellite Earth Station To Be at Mpoma**  
**92WT0103A Kampala THE NEW VISION in English**  
**16 Dec 91 p 16**

[Article by Caroline Lamwaka: "Mpoma To Get Second Earth Satellite Station"]

[Text] Negotiations are underway for the supply and installation of a second earth satellite station at Mpoma near Mukono.

However, the project is still subject to approval by the Government, the Chairman, Board of Directors, Uganda Posts and Telecommunications Corporation (UP&TC), Dr. Joseph Byamugisha said at the week-end.

Dr. Byamugisha closing a five-day seminar on digital satellite technology, organised by the International Telecommunications Organisation (Intelsat) and UP&TC, said the earth station, which will be equipped with modern modes of operation, expressed the hope that the station would be operational in the first quarter of 1993.

Dr. Byamugisha said also that negotiations are underway with the World Bank for the financing of the northern Uganda telecommunications project under which a microwave system will link Gulu with Kampala. A 3000 line digital telephone exchange will be provided at Gulu.

He told the seminar that UP&TC had embarked on telecommunications rehabilitation projects involving renewal and expansion of the subscriber cable networks in the City of Kampala and the municipalities of Jinja and Entebbe, using part of a U.S.\$52 million credit from the World Bank.

He added that a microwave network linking Uganda, Tanzania, Rwanda and Burundi will be completed around mid-1992 and part of this network linking Kampala to the south-western town of Kabale was completed last month. And a 3000 line digital telephone exchange has been provided in Kabale, bringing the number of digital telephone exchanges in Uganda to six.

Dr. Byamugisha was pleased to note that Intelsat had pledged to donate satellite communication training equipment and documentation to the Satellite Communications Training Centre (SATCOM) School. He said other pledges of unspecified assistance had also been received from other organisations.

He added that UP&TC, on its part, had been working to complete the construction of and equip Nakawa Training School which will house the SATCOM.

In his message to the participants, the Secretary General of the Pan African Telecommunication Union (PATU), Mr. Daniel Onyewuonyi noted that the SATCOM project was proceeding on schedule. He added "we may also have the occasion to invite some of you to present papers as your contribution to the activities of SATCOM."

He made a special appeal to manufacturers of satellite communication equipment to donate some of their products to SATCOM for training purposes.

Mr. Pascal Mukasa who had just returned from Intelsat headquarters where he attended the Board of Directors meeting, reported that the meeting had reduced the budget at its headquarters.

There was therefore need to organise such seminars. He reported also that the meeting had elected a new Director General for the organisation.

The participants were drawn from Uganda, Malawi, Sudan, Zimbabwe, Burundi, Botswana, Cape Verde, Ghana, Liberia and Kenya.

Papers were presented by various resource persons from ALCATEL, Telspace, AT&T, British Telecomms, COMSAT, Ghana Posts and Telecommunications Corporation, Hughes network systems, KDD, MCIT, NEC and Posts and Telecommunications Corporation of Zimbabwe.

## ZAMBIA

### Communications Cooperation With South Africa

92WT0114A Lusaka *TIMES OF ZAMBIA* in English  
9 Jan 92 p 3

[Unattributed article: "PTC To Expand Network"]

[Text] PTC [Post and Telecommunications Corporation] is to expand telecommunications network in liaison with South Africa to ease congestion.

PTC managing director Mr. Philemon Ng'oma said this in a speech read for him by director of telecommunications Mr. Ellis Musonda at the opening of the Zambia-South Africa bilateral meeting in Lusaka yesterday.

"As you are aware we are in the process of transferring our mutual traffic from the Indian Ocean region 60 degrees satellite to the Atlantic Ocean region 335.5 degrees satellite. It is hoped that expansion of the route will be easily undertaken and ease the congestion that has been noticeable for sometime," Mr. Musonda said.

Zambia now transmitted her traffic to Swaziland, Lesotho and Namibia through South Africa. Similarly, Zambia would welcome requests from South Africa to transit through Zambia to countries such as Tanzania and Zaire.

The Zambia-South Africa link has 36 circuits in operation and is the second largest traffic stream for Zambia and hence the need to accord it special attention which the bilateral meeting was meant to cultivate.

"This is designed to mark the beginning of an enhanced relationship which should filter through to personal levels," he said.

## ZIMBABWE

### Shortages Delay Phone Digitalization

92WT0102A Harare *THE HERALD* in English  
27 Dec 91 p 1

[Text] The telecommunications digitalisation project for Mashonaland and Manicaland expected to be completed in 1995 is already more than nine months behind schedule due to shortages of cement, bricks and other inputs, a PTC spokesman has said.

In an interview on Christmas eve, the spokesman said: "Part of the delay occurred when work had to be suspended for CHOGM [Commonwealth Heads of Government Meeting]."

The long Christmas break which applies to the building industry would also add another two months' delay.

However, the PTC was still hopeful that at least three exchanges could be commissioned next year, including the Masvingo digital exchange.

He said, if this went according to plan, subscribers should expect a remarkable improvement in the quantity and quality of telephone service.

The change would be significant, especially in Harare and Masvingo.

Although the corporation was now experiencing a critical shortage of bricks, cement and PVC pipes and steel products which go into the construction of cable ducts and manholes, the spokesman hoped that the situation would improve following the placing of cement on the Open General Import Licensing system.

This would enable PTC to import cement and speed up the project. Meanwhile, the spokesman said the Government and the Confederation of Zimbabwe Industries were helping in many ways to see the project succeed.

The exchanges covered include the Harare Trunk (STD and international), a new local exchange (Julius Nyerere Way) and satellite exchanges in Avondale, Borrowdale, Highlands and Cranborne.

In the contract, the Japanese, who are the main contractors, would be responsible for supplying the bulk of switching, transmission and other equipment which required foreign exchange.

They would also install and commission the exchanges. On the other hand PTC would be responsible for executing all works that were paid for in local currency.

One exchange at Cranborne was already being used for training personnel who would man and maintain the digital exchanges countrywide. The corporation was now involved in trench digging, including manholes at the corners of most roads in Harare.

The PTC's ambitious \$100 million digitalisation programme started last year and would involve installation of 120,000 additional telephone lines throughout the country.

The spokesman said there were 112 telephone exchanges countrywide and of these, 11 were being converted to computer-controlled exchanges.

Some of the electromechanical exchanges would be dismantled and equipment sent to the Msasa factory, Harare, for refurbishment, and would later be used to build smaller electromechanical exchanges in the rural areas.

### Telecommunications Hub Built in Qiqihar of Heilongjiang

SK1802124492 Harbin Heilongjiang People's Radio Network in Mandarin 1000 GMT 16 Feb 92

[Summary] The last two projects of the Qiqihar telecommunications hub—the 20,000-line program-controlled telephone switchboard and the 1,200-line automatic long-distance telephone switchboard—were put into operation at 0000 today. At that time, the entire project was completed on schedule.

The Qiqihar telecommunications hub is located in the central area of Qiqihar City. The floor space of the main building is more than 12,300 square meters. The 20,000-line program-controlled telephone switchboard and the 1,200-line automatic long-distance telephone exchange equipment imported from France were installed in the main building. Long-distance automatic telegram exchange equipment which is up to the world advanced level of the 1980's was installed to handle more than 100,000 telegrams a day. Automatic exchange systems, such as facsimile and picture telecommunications equipment, and microwave, coaxial cable, and short-wave telecommunications equipment were also installed.

The Qiqihar telecommunications hub provides domestic long-distance and international direct dialing service to 10 of the 11 counties in the western part of Qiqihar City, enables the local call capacity to increase by 50 percent, and substantially improves the quality of telecommunications.

### Vice Governor on Liaoning Post, Telecommunications

OW1502142292 Beijing XINHUA in English 1347 GMT 15 Feb 92

[Text] Shenyang, February 15 (XINHUA)—Northeastern China's Liaoning Province, a major heavy industrial city, has accelerated construction of post and telecommunications in recent years to meet the needs of its opening to the outside world, according to Wen Shizhen, vice governor of the province.

Wen said since Liaoning's opening to the outside world in 1988, provincial authorities have paid more attention to the improvement of its investment environment and construction of basic facilities.

During the Seventh Five-Year Plan period (1986-90), the province invested 1.4 billion yuan in the construction of post and telecommunication facilities. The capacity of telecommunications in 1990 doubled that in 1985, and the total volume of postal and telecommunications service increased by 20.2 percent, according to the vice governor.

Last year alone, the province invested a total of 702 million yuan posts [passage as received] and telecommunications construction and its total volume of postal and telecommunications service in the year was 28.7 percent

more than in 1990. By the end of last year, the province had already had 616,800 telephone lines in its urban areas and 166,000 telephone lines in its rural areas.

Besides all the province's 14 cities and 37 counties, its 397 townships have also installed telephones with domestic and international direct dialing capacity, according to Wen.

Wen said the province will invest more funds in construction of post and telecommunications beginning this year. By the end of 1995, the number of telephone lines in urban areas of the province will increase to 1.2 million.

Thanks to more foreign funds, the province imported a significant amount of equipment and technology. Before the end of 1995 the province will spend another 250 million U.S. dollars to import advanced technology of posts and telecommunications.

### Heilongjiang's 1992 Communications Development Plan

SK1802085892 Harbin Heilongjiang People's Radio Network in Mandarin 1000 GMT 15 Feb 92

[Summary] This year, Heilongjiang Province plans to build 2,000 kilometers of digital microwave circuits; add 220,000-line telephone switchboards in the urban areas, including 200,000-line program-controlled telephones; build 11,000-line long-distance telephone switchboard; build 1,300 long-distance telephone circuits; and ensure that 70 percent of the cities and counties in the province join the nationwide direct dialing service network and that 50 percent of the cities and counties have international direct dialing service as well as direct dialing service linking Hong Kong and Macao.

The Harbin-Heihe, Harbin-Jagdaqi, Harbin-Jiamusi, and Qiqihar-Beian digital microwave circuits will go into operation in the first half of this year. Thus, the program-controlled telephone switchboards imported by Suifenhe City and 12 prefectures and cities, including Qiqihar, Jiamusi, and Daqing, will go into operation within this year. The 40,000-line program-controlled telephone switchboards of Harbin City will go into operation by the end of this June.

Upon the operation of these projects, the province will greatly upgrade its communications capacity and greatly alleviate the strained communications situation.

### Telecommunications Construction Increased in Tibet

OW2002125792 Beijing XINHUA in English 1157 GMT 20 Feb 92

[Text] Lhasa, February 20 (XINHUA)—Residents in Lhasa, capital of Tibet Autonomous Region, now have direct dial access to all parts of China.

The over 5,000 program-controlled telephones which were installed during 1991 in Lhasa have provided a great convenience for the local citizen.

Zeng Zhongyi, director of the regional posts and telecommunications bureau, said that the Tibet regional government plans to install program-controlled telephones in six other major cities. In addition, he said that 58 ground satellite stations which will be installed during the Eighth Five-Year Plan period (1991-1995) will allow the region's residents to place long-distance calls throughout the region.

According to Zeng, both the central and local government will invest over 164 million yuan in telecommunications projects during the Eighth Five-Year Plan period.

He said that during 1991 Tibet invested over 43.91 million yuan in telecommunications projects, a 3.9-fold increase over the average annual investment during the Seventh Five-Year Plan period (1986-1990).

Zeng said that the largest part of the postal service construction project in Lhasa has been completed, and he estimated that the project will go into operation in August of 1992.

The 17 new long-distance lines and 145 local exchanges bring Lhasa's total number of local service telephones to 15,985. Automatically controlled telephone systems now account for 75.1 percent of the total telephones in service.

Seven cities and 76 counties in Tibet have established postal and telecommunications departments, and according to Zeng, the total investment in assets in the region's postal services exceeded 9.7 billion yuan.

He also pointed out that Tibet will build 28 ground satellite stations, and will install 5,000 program-controlled long-distance telephone lines in Qamdo, Shannan and Nagri Prefectures during 1992.

Lhasa's posts and telecommunications department has signed purchase contracts with an American company and the Shanghai Bell Company for advanced equipment to be used in the 58 ground satellite stations and has purchased major equipment to allow for the installation of an 11,000 program-controlled telephones in the region's six major cities.

#### **Communications Link Tibet With Outside World**

*OW2702023892 Beijing XINHUA in English  
0101 GMT 27 Feb 92*

[Text] Lhasa, February 27 (XINHUA)—Tibet, on the "roof of the world," now enjoys many modern communications facilities only available in developed coastal areas until a few years ago.

Tibet's communications facilities were once so backward that 50 years ago most Tibetans had no access to any

kind of postal service, and government documents were delivered by couriers on horseback.

Now the autonomous region has over 120 post offices and has telephone services linking it with all parts of China.

In order to meet the increasing demand, the region has invested about 100 million yuan in the construction of modern communications facilities since 1986.

In 1992 alone, Lhasa, the regional capital, installed program-controlled telephone switchboards with 5,000 lines, an intra-city switchboard with 146 lines, and 17 new long-distance telephone lines, bringing the total telephone capacity of the city to 15,985 lines, of which program-controlled telephones account for 75.1 percent.

The post offices offer such services as telephone, telegraph and fax.

In the coming four years the regional government plans to invest another 120 million yuan in the construction of communications facilities, according to Zeng Zhongyi, director of the regional Posts and Telecommunications Administration.

The funds will be used to construct program-controlled telephone services in six areas of the region and 58 satellite earth stations, aiming to make telephone service available to every county, and DDD [direct distance dialing] telephone service available to cities and towns above the prefecture level.

#### **Tibet Extends Radio, TV Satellite Transmissions**

*OW0403163892 Lhasa Tibet Television Network  
in Mandarin 1230 GMT 4 Mar 92*

[From the "Tibet News" program]

[Text] The Tibet Regional Radio and Television Commission and the Tibet Regional Posts and Telecommunications Administration gave a news briefing yesterday on increasing the time for satellite-transmitted radio and television programs in Tibet.

Present at the news briefing were leaders and reporters from the Tibet Branch of XINHUA, the Tibet stations of the Central People's Radio Network and the International Radio Network, XIZANG RIBAO, the Tibet People's Radio Network, and the Tibet Television Network.

Du Tai, director of the regional radio and television commission, briefed the attendees about the development of radio and television services in Tibet during the Seventh Five-Year Plan period.

He said: Thanks to the party's and the state's cordial regards and attention, radio and television services developed significantly in Tibet during the Seventh Five-Year Plan period. The number of radio stations and relay stations increased to 28 from the original eight; the

number of television stations and relay stations increased to nearly 200 from the original 87; and the number of satellite ground stations increased to over 480 from the original 47. The Ministry of Posts and Telecommunications decided early this year that satellite-transmitted radio and television programs in Tibet would be increased to 14 hours from the original four. Transmissions have been basically normal after a month-long testing and adjustments. It has been decided that 14 hours of radio and television programs will be broadcast daily, beginning 1 March. This is a generous gift to the Tibetan people during the Tibetan New Year.

Leading authorities of the regional posts and telecommunications administration, relevant engineers and technicians, and responsible comrades of the Tibet People's Radio Network and the Tibet Television Network pledged at the news briefing that they would perform their individual responsibilities at their respective posts to make sure that satellite-transmitted radio and television programs will be a success in Tibet.

**Inner Mongolia's '91 Telecommunications Viewed**

SK2701045292 Hohhot Inner Mongolia People's Radio Network in Mandarin 1100 GMT 26 Jan 92

[Summary] In 1991, Inner Mongolia invested 130 million yuan in the fixed assets of post and telecommunications departments. The Hohhot-Baotou and Baotou-Dongsheng optical fiber telecommunications lines were completed and put into operation ahead of schedule. The

mobile phone system in Hohhot was completed in a little more than four months. Large amounts of preparations were carried out for the Hohhot City's project to expand the long-distance telephone exchange by 2,000 lines, the Ulanhot-Baicheng and Chifeng-Chaoyang microwave projects, and the project to renovate the Hailar earth station. Post and telecommunications departments made 18 million yuan of profits in 1991, up 51.8 percent from the preceding year.

**Hebei Mobile Telecommunication Project Uses Swiss Equipment**

OW1003082492 Beijing XINHUA in English  
0651 GMT 10 Mar 92

[Excerpt] Beijing, March 10 (XINHUA)

**Economic News Brief: Mobile Telecommunication Project in Hebei**

A mobile telecommunication project with equipment imported from Switzerland has started construction in six cities of Qinhuangdao, Tangshan, Longfang, Baoding, Shijiazhuang and Handan of Hebei Province, north China.

The project is scheduled to be completed by the end of this year and then will be linked with the mobile telecommunication networks of Beijing and Tianjin cities.  
[passage omitted]

## REGIONAL AFFAIRS

### PRC, ROK Talks on Direct Telephone Link Underway

SK2002062792 Seoul YONHAP in English 0559 GMT  
20 Feb 92

[Text] Seoul, Feb. 20 (YONHAP)—Talks have begun on establishing a direct telephone link between South Korea and China's Shandong Province to meet growing telecommunications demand between the two countries, Communications Ministry officials said Thursday.

A delegation headed by Zheng Wansheng, president of Shandong Telecom Investment & Construction Ltd., met with officials of state-run Korea Telecom Thursday to discuss opening direct telecommunications between Korea and the Chinese province.

Korean officials called for establishment of a 400-kilometer optic fiber cable linking Korea's Sosan County to Weihai.

The Chinese side counterproposed an outdated tropo scatter system connecting Tokchok Island with Weihai.

The Korean officials said the Chinese delegation seemed to oppose the Korean overture because a submarine cable costs more than the tropo scatter system. The cost of the fiber optic cable is estimated at 45 million to 50 million U.S. dollars.

While trying to persuade the Chinese on the merits of their proposal, the Koreans agreed to a satellite relay station linking Korea to Weihai as an alternative.

The Chinese delegation leaves Feb. 26 after touring industrial facilities and meeting businessmen here.

## REGIONAL AFFAIRS

### Pakistan Beams Television Across Border

92WP0138A Calcutta THE TELEGRAPH in English  
3 Jan 92 p 7

[Text] New Delhi, Jan. 2—As in the case of CNN and Star Television, the information and broadcasting minister, Mr. Ajit Panja, is not unduly worried by the invasion of Indian skies and screens by Pakistan Television, which began yesterday.

Pakistan began beaming its programmes on New Year's Day on Asiasat, the satellite owned by the Hong Kong-based Hutchvision Television company. Cable-viewers in India who are connected to dish antennae are now able to switch on to Pakistani programmes at will.

Reacting to the development, Mr. Panja today said he was confident that Indian viewers would not be lured by Pakistani television. Rather, on the positive side, he said it would trigger a friendly competition with the "near brother" and make his boys and girls in Doordarshan "sit up and improve."

Besides, he pointed out, Indian television could already be viewed in most parts of Pakistan, barring the Kutch and Sind. "They are showing ghazals on PTV 2. We can put up our Amitabh Bachchan on television. Then we will see who gets the bigger audience," the minister said.

But media watchers and diplomatic circles in New Delhi are taking the development rather seriously. "Though no news telecasts have been made on PTV so far, they cannot be ruled out in future and Pakistan could effectively utilise the access it has gained into Indian homes to fuel trouble at will," an Indian diplomat pointed out.

But Mr. Panja said he was hopeful that Pakistan would be a good neighbour and restrain from doing so. "If they don't, we can take up the matter with them at the diplomatic level. And if they still don't listen, there is a forum in Geneva which entertains complaints in this regard," he said.

Significantly, both Pakistan and India were in the race for leasing a transponder on Asiasat for relaying their programmes. Whereas India failed in the bid because it was unwilling to offer anything more than \$1.5 million per year against the minimum demand of \$1.75 million, made by the Hutchvision company, which owns the satellite, Pakistan succeeded by offering the higher price.

India had wished to lease the transponder to strengthen its regional network in the country, presently confined to just five states, but it would have also given it an additional advantage in terms of the reach its programmes would have got over the neighbouring countries.

Mr. Panja, who preferred to put up a brave front in the face of those developments today, said India's next satellite, Insat II-A, which is scheduled to go into space

in March would be "able to fulfil all our broadcasting plans and strengthen our regional networks, our programmes would become available to dish antenna owners in a host of neighbouring countries including entire Pakistan," he said.

What Mr. Panja did not add, however, was that in case the satellite malfunctions, his ministry's future plans would be jeopardised.

## EGYPT

### Egypt To Produce Telephone Exchanges

92WT0089A Cairo AL-WAFD in Arabic 2 Jan 92 p 3

[Article by Ahmad Bakir]

[Text] Engineer Sulayman Mutawalli, minister of transportation and communication, announced that the new year will witness the start of Egypt's production of modern telephone exchanges, to save hard currency which used to be allocated for importing these exchanges. He added that this year will also witness the start of the implementation of the plan to modernize village exchanges and introduce telephone service in them. Minister Mutawalli and Counselor Mahir al-Jundi, governor of al-Gharbiyah yesterday inaugurated the Tanta exchange with a capacity of 39,000 lines at a cost of 35 million Egyptian pounds. After this increase, the waiting list moved up to the end of 1989. The inauguration was attended by 'Adil Husni Hashim, first deputy of the Ministry of Transport, Eng. Mahmud al-Suri, head of the communications authority; Eng. Hamdi al-Sahfi'i, head of the telephone section in the Delta, and leaders of the al-Gharbiyah Governorate and the communications authority.

Eng. Mahmud al-Suri announced that the number of available lines in the al-Gharbiyah Governorate in 1982 was only 15,000, and there are now 100,000 telephone lines of the advanced kind. He added that the installations that were removed from service at the Tanta exchange will be distributed to the cities of Zifta, Dikiris, Shirbin, al-Mansurah, Abu Qayr, and al-Maks to increase the capacity of their exchanges.

The minister and his entourage also opened the two-lane Tanta to al-Mahallah road that is 22 km long and 18 m wide. The new road will facilitate traffic flow between the new port of al-Dumyat [Damietta] and the surrounding seaside governorates, and Cairo. Eng. Fu'ad 'Abd-al-'Aziz, head of the Roads and Bridges Authority announced that this road was completed under state-of-the art technical specifications, its center and side lines were painted in reflective paint, and it was provided with guide and warning signs. It makes the road from al-Dumyat to Cairo and Alexandria a two-lane one, and allows the absorption of future traffic along it. The road cost 17 million pounds and took 22 months to complete.

**Direct-Line Telephone Networks Established**

92WT0106A Cairo AL-AHRAM AL-DUWALI in Arabic  
20 Dec 91 p 9

[Article by Muhammad al-Sa'dani]

[Text] Minister of Transport and Communications Sulayman Mutawalli stated that direct "hot-line" telephone service had been established with the United States and Japan, and calls can be made from Cairo Airport, the American University, and the American and Japanese embassies. This service will be established with France, then made universal. Eng. Wajdi 'Abd-al-Hamid, head of the national communications authority, affirmed that about 390,000 lines will be added during the coming year in all governorates. It has been decided that two groups of engineers and technicians will be formed to monitor telephone breakdowns on a daily basis, and over the next 3 months magnetic [calling] cards will be used to call from public telephones.

The head of the authority said that the new telephone network in Shubra will be completed with a capacity of 26,000 lines; as will the al-Haram network with a total capacity of 45,000 lines, of which 16,000 will be in al-Maryutiyah, 14,000 in al-'Umraniyah, and 15,000 in al-Haram.

Eng. Mahmud al-Suri, deputy head of the communication authority, said that the magnetic cards will be used for local calls between governorates, or internationally through telephone and post offices, and that 500 telephones on this system will be provided in the governorates. He indicated that public telephone booths will have two telephones, one for coins and the other for cards, which will be made available in two kinds: one for 15 Egyptian pounds good for 150 [calling] units, and the other for 30 pounds, good for 300 [calling] units. He explained that the unit, which is worth 10 piasters, can make a local call, and if a person wants to call one of the governorates, it will use more than one unit, and the same for international calls.

The deputy head of the authority added that the new telephones will be tested before being distributed to the new subscribers to make sure that they work, and that breakdowns will be fixed within 24 hours, except in the case of breakdowns in the networks or exchanges, the repair of which would take some time.

Eng. al-Suri affirmed that two working groups of engineers and technicians had been formed to monitor the repair of breakdowns on a daily basis, and officials in the authority had been supplied with pagers to make it easier to contact them when they are needed. He affirmed that fire alarms covered all important areas in the authority, especially the exchanges.

**Space Channel To Move to New Satellite**

NC2302091992 Cairo MENA in Arabic 1354 GMT  
22 Feb 92

[Text] Cairo, 22 Feb (MENA)—Amin Basyuni, chairman of the board of the radio and television union, clarified in a statement today that the Egyptian Space Channel [ESC] transmission will be moved from the first Arab satellite, which ran out of fuel, to another high-powered channel through the third new satellite which will be launched this week.

In this regard, he pointed out that there is an agreement between Egypt and Arabsat to continue receiving ESC on the high-powered channel through the new Arab satellite.

He said ESC will begin a new stage in March from the perspective of regulating the times of its programs, which will primarily show the programs of the Egyptian television's first channel. It will also air some select programs of the second, third, fourth, and fifth channels to cover the times of the local programs on the first channel.

Amin Basyuni adds that a link-up announcer [mudhi'at rabt] will be appointed for ESC according to a weekly schedule. He pointed out that towards the end of March, a new studio for ESC will be set up where its own link-up announcers will operate.

**Arab Satellite To Be Operational Within 2 Weeks**

NC2902192892 Cairo MENA in Arabic 1818 GMT  
29 Feb 92

[Text] Cairo, 29 Feb (MENA)—Engineer Sulayman Mutawalli, minister of transport and communications, returned here this evening from Paris on his way back from French Guyana, where he attended the launching of the third first-generation Arab satellite.

In an arrival statement, Eng. Mutawalli said that the launch was successful and that the Arab satellite will become operational within two weeks, following checks that it is in the correct orbit. Mutawalli noted that the satellite will boost telephone service among Arab states and will meet their future communications needs. The new satellite, he added, will allow for the transmission of television programs via the Egyptian Space Channel and will help regional communication among Arab states.

**ESC Director on Current Services, Transponders**

NC1102213992 Cairo AL-IDHA'AH WA AL-TILIFIZYUN in Arabic 8 Feb 92 p 9

[Excerpts] The Egyptian Space Channel [ESC]—Egypt's ambassador and cultural image—currently covers a wide region and its transmission extends to Asia, Africa, Europe, all the Arab countries, and all remote Egyptian areas once deprived of television transmission for technical reasons, such as the desert and newly built cities.

What is ESC's future after its success so far, particularly considering the obstacles currently facing Arabsat? ESC

director engineer 'Abd-al-Salam Khalil had the following to say: The current generation of Arabsat contains two satellites, IA and IB. Satellite IB will reach its life expectancy in three years, while satellite IA has already passed it, but continues to function. A third satellite, IC, will be launched in February. Egypt will have two high intensity transponders in this satellite. Egypt will use one and the second will be a reserve. [passage omitted]

Asked if every Egyptian citizen can receive the space channel, Khalil said: It is possible for every citizen to receive the space channel transmission by means of a three-meter dish 19 degrees East operating on S band on 2560.5 MHz. [passage omitted]

## INDIA

### Cell To Monitor Pakistan Satellite Telecasts

92WT0108A Calcutta THE STATESMAN in English  
25 Jan 92 p 1

[Text] With Pakistan Television beaming its programmes for Indian viewers through the Asiasat satellite since New Year's Day, a special cell of the Union Information and Broadcasting Ministry has started monitoring the programmes since 15 January.

The cell, housed near Delhi, has sophisticated equipment and gadgets to monitor the PTV-II's telecast, and also other foreign TV programmes which are beamed to India via satellites.

Announcing this in Calcutta on Friday, Mr. Ajit Panja, Union Information and Broadcasting Minister, told THE STATESMAN that his Ministry was keeping a "special watch" on the Pakistani programmes since their reach through the satellite would not only cover entire India but also a large part of Asia.

Keeping tabs on the PTV-II's programmes had become essential since, sooner or later, it would certainly try to spread misinformation on various events and issues in India.

The Broadcasting Minister said PTV-II had hired the Asiasat for the next five years and, to gain wide acceptance of Indian viewers, had got women participants in its programmes attired in saris with red bindis on their forehead. He said his Ministry was well aware of the PTV-II's designs and Doordarshan had already braced itself to counter the Pakistani propaganda.

Some topical films on Kashmir and Punjab had already been made. These would be beamed to Pakistan as soon as that country launched its TV war against India. "We will hit back with devastating effect if Pakistan launches a war through television," Mr. Panja added.

The Doordarshan films would be beamed through six powerful transmitters that have been erected from Poonch downwards all along the Pakistani border. "Our advantage is that these transmitters cover all of Pakistan and our programmes can be seen without the dish

antenna. This is not the case with PTV-II programmes which Indians can see only with the help of dish antenna.

"Except spreading disinformation we don't think the PTV-II poses any kind of threat to our culture, taste and system. We welcome more Indians watching foreign TV programmes since I think this will help us to improve the quality of our own TV programmes," Mr. Panja observed.

### Plans for High Speed Data Transmission Told

92WT0109A Madras INDIAN EXPRESS in English  
23 Jan 92 p 5

[Text] Madras—The telecom network will be geared to handle the high speed data transmission requirements of computer users during the Eighth Plan period, according to Tamil Nadu Telecom chief general manager P. Kameswara Rao.

Inaugurating an exhibition, organised by the Computer Society of India (CSI), Madras chapter, as part of a two-day exposition on "Data- Communications—Today and Tomorrow," on Wednesday, he said that ambitious plans had been drawn up for the increased use of optical fibre, digital co-axial and digital microwave transmission systems in the network.

The employment of synchronous digital multiplexing systems would make the system capable of handling data transmission speeds up to 622 mbps. At the level of individual users data transmission speeds have increased tenfold every five years. Now it is possible to transmit data at 64 kbps but this may increase to 512 kbps in the next five years.

It has been proposed to the department of Telecommunications that the network development plans should be so designed as to make it capable of handling two to three times the projected demand. "Super highways" for data transmission should be developed among the major cities.

Mr. Kameswara Rao also pointed out that the network was presently not capable of effectively supporting local area network (LAN) connections. Reviewing the various options available in this regard he said one of the solutions may be to connect the LANs within cities by an optical fibre system which can be connected to the network with "various bridges and routes."

Madras Telephones chief general manager M.G. Jayaraman, who inaugurated the convention, said that telecom technology and services stood poised for a quantum leap in the Eighth Plan period.

While the country was slowly moving towards an integrated telecom network which handled data, fax and

other communication forms apart from voice, the development of a full-fledged data network, would not be complete unless industry came up with indigenous products needed for it.

Talking to newsmen later, DoT data network's chief general manager Mohammed Yaseen explained that the recently started public switched data network I-NET, connecting eight cities, would be handling about 1,000 connections by March or April. Its capacity would be increased to 1,800 connections by year-end. Under phase two of the project, 89 cities would be covered by I-NET.

Madras Telephones authorities also explained that one 64 kb connection had already been provided in the City and many more were on the anvil.

CSI chairman S. Mahalingam said that the exposition had been organised to fill up the "information gap between the service providers like DoT, Videsh Sanchar Nigam and manufacturers on the one hand and customers who need to know more, on the other." Many companies were not aware of data communication possibilities, and the hardware and software available.

CSI co-ordinator V. Ramasubramaniam said live demonstrations formed a part of the exposition with emphasis on the practical aspects of data communication. Senior DoT and MTNL officials were participating in the exposition which would conclude with a panel discussion.

### **Initial Steps in Telecom Privatization Taken**

*92WT0110A Madras THE HINDU in English  
20 Jan 92 p 8*

[Text] New Delhi, 19 January—In a significant move to vacate its monopoly over purchase of large telephone exchanges, the Department of Telecommunications (DoT) has called for tenders from companies registered in India to supply two lakh lines of digital telephone exchange equipment in configuration of 10,000 lines, 30,000 lines, 50,000 lines and 10,000 lines exchange expandable up to 40,000 lines.

Though DoT has already advertised in major dailies regarding a tender for supply and operation of cellular phones by the private sector Indian companies, the telecom industry, however, did not expect the DoT to come out so soon with the idea of private sector participation in the supply of large telephone exchanges namely Main Automatic Exchanges (MAX).

**Tender notice:** According to telecom industry sources, they were really surprised to see a major tender notice inserted by DoT in leading dailies on Saturday which called for supply of different range of MAX with a combined digital local telephone line requirement of two lakhs. The bids have been invited from companies registered for the manufacture of switching equipment in India and have obtained clearance from the RBI.

According to the advertisement while the due date for submission of tenders is 10:30 a.m. of 16 March 1992, the tenders would be opened half an hour later at 11 a.m. on the same day. The offers according to the notice will have to be in rupees and DoT will not make available any foreign exchange.

**Two major issues:** The decision of DoT has raised two major issues. First, by insisting that offers should be made in rupees, DoT has tried to tell the participating companies which include a few multinational companies (MNCs) like Japan's Fujitsu (which has already set up a joint venture with the Punjab Electronic Development Corporation) and Alcatel (through its joint venture with Dr. B.K. Modi) that deregulation and liberalisation of telecom cannot be on unequal terms.

Second, by stating clearly that the tender would be open to only those companies (including foreign) which have obtained RBI clearance by last day of receipt of tender (16 March 1992), DoT has clearly signalled to other MNCs like Sweden's Ericsson, Germany's Siemens, AT&T of United States that the Indian Government could not wait endlessly for them.

Till now, the MNCs had been arguing that they would be prepared to come to India in the telecom field only if DoT gave up its monopoly over purchase of MAX. All these years, DoT had been buying telecom switching equipment from its undertaking Indian Telephone Industries (ITI) besides some purchases from abroad. The tender notice has thus clearly answered the major question raised by European and American multinational telecom giants as the Government has consciously decided not only to give up its monopoly but also treat ITI on par with the private sector.

**Message to multinational companies:** The sources said it was clever on the part of the Minister of State for Communications, Mr. Rajesh Pilot, to have made such a sudden move so that multinationals like Ericsson, Siemens and AT&T do not hold the country to ransom by introducing an element of suspicion over Government's genuine attempts at attracting foreign investment. In fact, Ericsson and Siemens have submitted their proposal to the Foreign Investment Promotion Board (FIPB) and reports suggest that they have been asking for too many concessions and assurances. By advertising the tender notice, DoT has not only made its position clear but has also conveyed a message to these multinationals, that they either join the race or be left out of it.

Now even if these two companies join the race, the sources expected the competition to be restricted between the public sector ITI and Japan's Fujitsu's and with Modi-Alcatel being pushed to the next position. As regards the demand for offers to be made in rupees, it was pointed out that Fujitsu had recently offered to the DoT that it would supply a certain number of switches in rupees. According to informed sources, the Japanese

company is apparently trying to tie-up its offer with a huge credit being made available by the Japanese Government.

#### Low Orbit Satellites Considered, New Launch Vehicle

92WT0111A Madras *THE HINDU* in English  
17 Jan 92 p 4

[Text] Bangalore, 16 January—The Indian Space Research Organisations is considering putting up low earth orbiting satellites for mobile communications, according to its Chairman, Prof. U.R. Rao.

Land mobile satellite systems were entering the operational phase in a big way to meet the requirements of the transport sector, emergency communications and remote area communications, said Prof. Rao, delivering the 3rd Jawaharlal Nehru Memorial Lecture at the Central Power Research Institute here on Thursday. This would be the precursor for satellite based personal communication systems which might emerge as the major services of the next century.

Communication satellites such as the INSAT satellites are in geostationary orbit some 36,000 km above the earth and remain stationary with reference to places on the ground. But the mobile communication satellites of the sort being considered are in low earth orbit (LEO) only a few hundred kilometres above the ground and keep circling the globe. Hence a number of such satellites are required in orbit to maintain communications (just three satellites in geostationary orbit are adequate to take care of worldwide communications).

Several LEO systems, such as the Motorola's Iridium system involving 77 satellites, Orbital Sciences Corporation's Orbcom using 20 satellites, and UNESCO's Loc-syst were under consideration for providing messaging and voice services, said Prof. Rao. "ISRO has also come up with new concepts in this area which could start with just six satellites and be expanded, as resources permit, to reduce the turnaround time for voice or message communication," he said.

The INSAT-2 series would be able to meet the communication requirements of the country up to 2000 AD by which time the third-generation communication satellites would be ready. The first of the INSAT-2s would be launched in March this year and be followed by four more satellites of the same class, he said.

The GRAMSAT satellites proposed by ISRO for providing educational services to rural areas would incorporate two-way interactive communication.

**New ASLV:** A new ASLV (Augmented Satellite Launch Vehicle), with extensive modifications carried out in the wake of the previous two failures, was under fabrication and was expected to be launched in the first half of 1992. The ASLV would put into orbit a SROSS satellite

carrying a state-of-the-art gamma ray burst experiment and a special aeronomy payload to study the behaviour of the upper atmosphere.

The first launch of the PSLV (Polar Satellite Launch Vehicle), capable of putting the IRS class of satellites into orbit would also take place this year, he said. The Geostationary Launch Vehicle (GSLV), which could put INSAT-2 satellites into orbit, was likely to be ready by 1995-96. The country would then become totally self-sufficient in launcher technology, he said.

#### Bidding for Telecom Service Contracts Decided

92WP0139 Madras *INDIAN EXPRESS* in English  
29 Dec 91 p 12

[Text] New Delhi—The Department of Telecommunications (DoT) is belatedly opening a new chapter in the field of telecom services by deciding to offer licences through competitive bidding for provision of value-added services (VAS).

To begin with, DoT is issuing a tender enquiry to pre-quality prospective franchisees for providing cellular technology-based mobile telephone service, popularly referred to as car telephone facility in Delhi, Bombay, Madras and Calcutta.

This will later be followed by tender enquiries for operating six other VAS. These are: voice mail, electronic mail, audio conferencing, video conferencing, radio paging and videotext.

The VAS concept refers to provision of add-on facilities to subscribers by utilising the basic telephone network, which DoT has decided to maintain as its preserve. These are called value-added services because they will bring in additional revenue to DoT through franchise fees and network access charges from VAS operators and generate additional returns in the form of tariff income from the basic network. This income will, obviously, accrue to the operators. The franchising business will also enable DoT to concentrate its investments on expansion and modernisation of basic telephone network.

DoT had set up a committee in October to specify VAS which should be privatised and suggest terms and conditions for issuing VAS franchises.

The Communication Minister, Mr. Rajesh Pilot, told reporters here on Friday that it was proposed to provide the seven specified VAS mainly on franchise basis in all towns with a population of five lakh and more during the Eighth Plan.

It may be recalled that DoT had in 1987 rejected all applications from private and public sector companies for providing cellular mobile and radio paging services. DoT officials argued that provision of these services by outsiders was fraught with risk of telephone-tapping and would deprive DoT of the credit for giving a facelift to telecom services. It had decided that such services

should be provided by DoT and its undertakings such as Mahanagar Telephone Nigam Limited (MTNL). It, however, could not make much headway in this area because of a controversy engineered by Mr. Sam Pitroda, the so-called messiah of high technology, under the garb of elitist nature of such services and resources crunch. The government later discovered that he wanted certain American firms to introduce car telephone technology in the country. DoT officials, however, frustrated his game-plan.

Mr. Pilot said DoT had decided to revise rural telecom tariff structure to enable introduction of group dialling facility which would generally cover a tehsil and enable direct dialling between exchanges located in a tehsil. Both manually and dialled calls would have a uniform tariff for calls within short distance charging areas (SDCAs) which would generally be co-terminus with a tehsil.

He said DoT had also decided to set up a committee to suggest tariff for direct dialling between the adjoining urban centres and outlying areas. This facility, which was available in some cities, would be provided uniformly in all major centres to reduce the movement of persons between them, he added.

Mr. Pilot said Indian Telephone Industries (ITI) was negotiating with certain foreign firms for export of its computer-aided design (CAD) software.

### **Delay in Border Network Facilities Questioned**

92WP0140 Madras INDIAN EXPRESS in English  
4 Jan 92 p 9

[Article by Natini Singh]

[Text] The government has been dragging its feet on the most crucial issue of installing TV transmitters in the border areas, and integrating them into the national network. Successive ruling parties at the Centre have completely neglected to pay any attention in the matter. It appears as though there are saboteurs in the Information and Broadcasting Ministry, who are bent upon thwarting the network expansion projects. Else, how does one explain the inexcusable delay in establishing TV and radio broadcasting facilities in the sensitive border areas, which are bombarded with broadcasts from Pakistan and China?

A confidential note prepared by the Joint Secretary concerned in the Ministry, and forwarded to I&B Minister Ajit Panja's secretary on December 31, 1991, discloses that five high power transmitters (HPTs), which were sanctioned in January 1987, have not been completed. For almost each one of them, the completion date has been revised from 1989 to 1995.

### **Callous Lapse**

The average time now taken for installing the vital facilities is seven to eight years, whereas the normal time

even in non-priority areas—from green fields to commissioning—is two to three years. In fact, the Ministry has often claimed that it has commissioned a transmitter a day in the three years from 1988 to 1990. Thus, the delay in setting up network facilities in the border states is truly a mystery, and amounts to a callous operational lapse.

There are several instances of the delay in laying the network infrastructure. The 10 kw HPT transmitter sanctioned at Jaisalmer, Rajasthan, with a capital cost of Rs 3.32 crore is still hanging fire. The project is still "under consideration" of the Ministry. The revised date for completion is 1993, seven years after the initial sanction.

After spending Rs 2.9 crore, it has been discovered that the 10kw HPT at Bhuj, Gujarat, is located on a geological fault-line. Work was suspended in November 1989, and the contract with the construction firm was rescinded. The completion date has been put off to 1995.

### **Willful Neglect**

The case of Rameshwaram Tamil Nadu, strengthens the suspicion that wilful neglect is the cause behind the delay in completing the network projects. In January, 1987, a year and a half before the IPKF went into Sri Lanka, an HPT was sanctioned for Rameshwaram, with a capital outlay of Rs 3.32 crore. By March, 1991 an amount of Rs 1.87 crore had been spent, and a revised cost estimate submitted. The report does not even claim that it is "under consideration," as it does in the case of Jaisalmer. The new date for completion is 1995.

At the Gangtok TV centre in Sikkim too, the progress has been sporadic. The centre, sanctioned in January 1987, had overrun its original budget by 15 per cent by March 1991, and the transmitter and the programme facility centre is now targeted for completion by 1994, provided its enhanced budgetary requirements are sanctioned.

Another scheme, "Strengthening of TV coverage in Border Areas," was formulated in 1989. It involved an outlay of Rs 63 crore, and the I&B Ministry circulated it to various appraisal agencies for comments in February 1990. Comments are still awaited.

Meanwhile, no action has been taken on important proposals like augmenting the power of the HPTs at Amritsar, Jammu and Agartala, establishing an HPT at Cherapunji, and constructing playback facilities at various border stations.

The performance of radio projects which were intended to cover border areas is equally dismal. The joint secretary's report on the super-sensitive Itanagar area of Arunachal Pradesh, where a 100 kw MW transmitter should have been commissioned two years ago, says: "The buildings for transmitter and studios are ready... Studio equipment have (sic) been received... Permanent power supply connection at studios and transmitter have been obtained but there is no power."

### "No Headway"

On the progress of the proposed AIR station at Dhubri, Assam the report observes candidly "The project is not making any headway" on the AIR station at, Lungleh, Mizoram, the report notes: "...TSL had inordinately delayed the construction of FM antenna tower. Hence the work was withdrawn from TSL and has now been handed over to CCW, AIR"; on Kurseong, West Bengal, the information is intriguing, if dismal: "Tenders were not received in two calls and work has now been awarded.... The construction work has held up (sic) as the road has collapsed"; on the proposed radio stations in Jammu and Kashmir at Kargil and Poonch, the report mentions that the commissioning of the stations would be in "1992-93," more than three years after eruption of the "foreign-inspired" secessionist activity in the Valley was officially noted.

Several reasons are being advanced by the Ministry for the delay in the completion of projects: That land has not been made available by the state governments; that the contractor had defaulted. But the explanation is rather flimsy. Land acquisition and default by contractors are passed in the country, and have been resolved efficiently in hundreds of cases in the past. The novel feature of the Ministry's record in the border areas is the inexplicable gestation period of seven to eight years in installing hardware.

This delinquency is particularly galling today, after Pakistan has announced its intention of special telecast to J & K, and after STAR TV has inaugurated its fifth channel with 24-hour programmes of family entertainment. The Pakistani telecast is alone capable of diverting the urban viewers who have not yet been seduced by STAR TV, or by the BBC's channel of news and current affairs and documentaries.

Except for Doordarshan's Information Officers, everybody knows the extent to which these telecasts have eaten into Doordarshan's constituency. The Doordarshan's "permanent loss" is of the order of about 7,000 prime time viewers per hour every day during 1991, to cable network giants—CNN, STAR TV, and the BBC. In fact, CNN's link-up with PALAPA, the Indonesian satellite, last month, has ensured virtually free a 24-hour telecast over India's entire eastern sea-board, in a sweeping curve from Arunachal Pradesh, West Bengal and Orissa to Andhra Pradesh, Tamil Nadu and parts of Kerala.

While we are lamenting the secessionist tendencies fuelled by foreigners, foreign networks and our own cable TV is driving Doordarshan from the Indian TV screens at an alarming pace.

And what is the government's response: To postpone indefinitely the decision on a second channel which would be capable of offering keen competition to the foreign networks, and to neglect the installation of TV and radio hardware in the border districts.

Mr. Panja has a reputation for answering mail promptly, accessibility, and acknowledging the fact that ministers and MPs are accountable to the people and hence the Question Hour on Doordarshan. But this reputation is tarnished by the omissions of the last six months. Or, are his hands tied? The foreign hand is active, and if the Indian hand wasn't so busy pointing a finger, perhaps it would join hands on our terms with the foreigners, instead of pursuing cuckoo-land proposals of banning cable TV or dish antenna.

The government has a lot to answer for, and not only on the state of TV in border areas. Isn't it time Mr. Panja re-introduced Janavani or Khula Manch to let the people meet the ministers, eyeball-to-eyeball? It might lure some of the runaway audiences back to Doordarshan. But the competition is tough and scintillating. The competitors talk the language of the 21st century, while Doordarshan sounds like a voice from the past, really door (distant).

### IRAN

#### Telecommunications Projects Inaugurated

NC2302162092 Tehran Voice of the Islamic Republic of Iran First Program Network in Persian 0430 GMT  
23 Feb 92

[Text] The first local satellite transmission station in Iran, the Zahedan international telephone exchange, and a 256-number telephone center of (Kiannaru) city in Zabol with the code 05445 were inaugurated and became operational in the presence of Gharazi, minister of post, telegraph, and telephone; the representatives of the supreme jurisconsult in the province; and the Sistan va Baluchestan governor general.

The Sistan va Baluchestan ground satellite transmission station is located in a 1,200-square-meter building on a 7,500-square-meter plot, has 96 communication channels, and can cover 17 far-reaching villages in Sistan va Baluchestan. Initial coverage of this station, which became operational yesterday, will extend to the seven villages of Nahug, Esfandak, Bent, Sangar, Poshtkuh, Fannuj, and Jalq, and 10 other villages will be covered in the near future.

These projects, which were completed by Iranian experts, were funded with more than 14 billion rials of Tehran Telecommunications Company credits.

### JORDAN

#### Communications Director on Phone Expansion, Problems

92WT0060A Amman AL-DUSTUR in Arabic  
21 Nov 91 p 2

[Unattributed article: "Cable, Wireless Communications Authority Will Disconnect Delinquent Subscribers Next Year"]

**[Text]** The Cable and Wireless Communications Authority plays a major role in propelling all aspects of life in Jordan by providing citizens with state-of-the-art telephone services.

We elected to discuss certain issues of concern to the citizenry with Mr. Ahmad al-Nawawi, director-general of the authority, in order to clarify ambiguities, especially with regard to the authority's collection practices and the issues of international calls and excessive local calls.

Mr. al-Nawawi says that amounts owed by subscribers are public funds owed to the state treasury and, as stipulated by laws and regulations, must be collected by all available means. It is therefore the practice of the authority to disconnect delinquent subscribers as a first step to be followed, should there be no response, by invalidating the subscriber's service contract after notification by registered mail that the subscriber has a final grace period of two months [to pay his bills]. Should there again be no response, more stringent measures would be taken and the amounts due are referred for collection in accordance with the law governing the collection of state funds. That entails referring [the case] to the attorney general, attaching real assets and chattels, and restricting the travel [of delinquent subscribers].

He added that the authority began to apply those measures in the middle of this year to collect overdue accounts, and will continue to do so for future delinquencies.

#### Monthly Disconnections of Service

He continued: "In order to avoid the accumulation of subscription delinquencies in the future, the authority has instituted procedures to make disconnections regularly every month, so that no bill will be allowed to remain unpaid for longer than a month. This program will be put in effect with the advent of the new year, God willing, now that the authority has equipped all its Amman centers with computers, and will do the same for the governorates. Computers will allow payments to be credited daily, and will provide up-to-date information on subscriber accounts. They will also make it possible to print detailed, duplicate bills to be used for ensuring payment. Delinquencies anywhere will be promptly red-flagged for that appropriate action to be taken."

#### Excessive Local Calls

The Director-General of the Cable and Wireless Communications Authority said that it is common knowledge that subscribers are entitled to 1,000 free calling units a year (a unit equals six minutes or a fraction thereof). The authority used to calculate these calls at the end of the year and charge for them in a lump sum, but in order to lighten the burden on subscribers, the authority has decided to stagger the billing so that the cost of excess calls would not hit subscribers all at once. Calls are now tracked by computer every three months and the results reflected in that month's bill. Should the difference

between the new and old readings exceed the allowable 1,000 calls, they would be billed at the rate of 10 fils [one-hundredth of a Jordanian dinar] per unit. By the same token, no charge for excess calls is made as long as meter readings do not exceed the allowable 1,000 units.

He explained that, if a subscriber exceeds 1,000 units in the first quarter of the year, all calls made in the remaining three quarters are considered excess calls and billed accordingly.

#### Local and International Wrong Numbers

As to local and international wrong numbers, Mr. al-Nawawi explained that there are no billing mistakes and that subscriber errors fall into one of the following categories:

First, area code mistakes, misdials, or both: The exchange, without human intervention, connects the number and area code as dialled by the subscriber. Therefore, when a subscriber makes an error in a country code and dials 002 instead of 003, for example, he would be connected to the wrong country. Should he miss dial, or dial a wrong number, he likewise would be connected to a number unknown to him. Subscribers are asked to exercise care when dialling area codes and numbers in order to avoid mistakes for which they are liable.

Second, other instruments on the line besides the telephone: Many such instruments, such as faxes, answering machines, and call controllers, are connected to telephone lines to perform assorted services, and they may confuse the subscriber into repeating a call when they may have already made the connection and received the call without ringing or otherwise so indicating.

Third, the use of unauthorized cordless equipment, which subscribers install without the authority's knowledge: Such instruments may not conform to the local networks' specifications, and therefore may cause lines to cross.

Mr. al-Nawawi concluded by saying that, those common errors notwithstanding, the authority allows subscribers to appeal [bills] within a stated period of time. The appeals are reviewed by a committee for that purpose composed of specialized technicians, administrators, and financial experts, as well as a member of the Audit Bureau.

## SUDAN

#### Telecommunications Privatization Addressed

92AF0374Z London AL-SHARQ AL-AWSAT in Arabic  
2 Feb 92 p 10

[Article by Ahmad 'Umar Mas'ud: "Telecommunications Organization Put Up for Sale in Sudan"]

[Text] Khartoum—The Sudanese Government has announced that it is putting the Telecommunications Organization up for sale after it has lost money for years.

The losses and low level of telecommunications services in Sudan are attributed to the lack of proper state financing, due to scarce domestic and foreign resources.

Government sources say the telephone network is totally reliant on electrical switching devices that vary from country to country in terms of manufacture and capacity, and that they have exceeded their hypothetical operational life.

Engineer 'Awwad al-Karim Wadi'ah, general manager of the General Organization for Telecommunications, adds

that the telephone switching devices in Khartoum are divided into three types, based on origin:

- British: These are the oldest in terms of date of operation, having exceeded their hypothetical operational life twice over. Indeed, the factories that produced them closed long ago, with the result that spare parts have disappeared completely.
- Dutch: Switching devices still operating and in reasonably good condition. Although their hypothetical operational life is about to end, they still operate satisfactorily. There have been 3,000 new lines added, raising their capacity to 15,000 lines.
- Japanese: These are all traditional analog switching devices that have been surpassed by modern digital technology.

**Profits From \$6 Million AT&T System Exceed Expectations**

NC0503141192 Yerevan ARMENPRES International Service in Armenian 1215 GMT 27 Feb 92

[Text] Yerevan, 27 Feb (ARMENPRES)—The REPUBLIKA ARMENIA paper writes that the international digital communications system, with its earth-satellite station, has now been operating in Armenia for the past few months. The American company AT&T installed it.

Erik Ensen, Moscow representative of a company subsidiary, has described the installation in Yerevan as

"The event of the year," adding that it is the most modern system on the international market. Armenia is the only former Soviet republic to have it.

The project, which allows direct telephone communications with Europe and the United States, cost nearly \$6 million, of which \$1.95 million was credited to the Armenian Government by the Communications Ministry [not further specified]. AT&T donated the remaining \$4 million.

Armenian Deputy Minister of Communications Robert Arutyunyan noted that the profit from the use of the system has exceeded expectations.

## REGIONAL AFFAIRS

**Report Issued on Turkish Cypriot Broadcasting**  
*NC2602182692 Nicosia ALITHIA in Greek 24 Feb 92 p 1*

[Report by Takis Agathokleous]

[Text] The government is concerned with the activities and continuous expansion of Bayrak [Turkish Cypriot radio and television association] in the occupied area. According to an official report ALITHIA has uncovered today, Bayrak can broadcast its programs around the world, something the Cyprus Broadcasting Corporation [CyBC] cannot do, because it is linked to Turkish television.

The full text of the government report, dated 7 February 1992, on Bayrak's programs and activities follows:

The illegal Bayrak radio and television station has succeeded in drastically improving its radio and television network through important investments and expenditures from 1986 to 1990.

During this period the number of its FM radio transmitters increased from three to five, the number of television transmitters from one to three, and the cumulative power of its television transmitters from 100.5 kilowatts [kw] to 940 kw.

During the same period the hours of transmission of radio programs of the first channel increased from 6,022 to 6,387 and of the second channel from 4,015 to 4,380 hours. The number of hours of television programs transmitted was very significant, as it increased from 624 to 12,296.

In 1991, particular importance and priority was given to further improving and increasing television programs. The number of television transmitters was increased from three at the end of 1990 to five in 1991 with cumulative power of 955 kw. The number of relay stations increased from five in 1990 to 28 at the end of 1991 and their cumulative power increased from 2.5 kw to 9.7 kw.

Bayrak's goal for 1992 is to increase the number of FM transmitters to eight so that their cumulative power increases from 96 kw to 180 kw for larger coverage. Efforts to develop a new television studio to produce more programs will also continue. Training personnel in the use of technical hardware will also continue.

The money invested to expand technical capabilities and Bayrak's programming should make us stop and think, particularly if we compare it with the expansion of CyBC. We should not ignore the political ramifications of this expansion or the live relay of Bayrak's television programs from Turkish television, which even further expands the capacity to transmit programs around the world. Turkey has already leased its own satellite channels and can send programs over six channels to different communications satellites.

## CYPRUS

**CyBC TV Postpones Launch of Second Channel**  
*NC2702145692 Nicosia CYPRUS MAIL in English 27 Feb 92 p 1*

[Excerpt] The parliamentary parties yesterday agreed that CyBC [Cyprus Broadcasting Corporation] could go ahead with its plans for a second TV channel, but the corporation announced last night that it will wait until after its budget is approved by the House of Representatives.

The second channel was to have been launched on February 1, but after an outcry that the Corporation was going ahead without the approval of its budget first, it was postponed until March 1.

The proposed April launch of the [Greek Orthodox] church-sponsored Logos TV station was the major push behind the rush to go ahead with the second channel.

But a statement yesterday said that in light of the House Finance Committee's decision to table the CyBC budget on March 5, the launch will be postponed until then. [passage omitted]

## GERMANY

**Telekom Reports Progress, Setbacks in East**  
*92GE0223B Frankfurt/Main FRANKFURTER ALLGEMEINE in German 28 Jan 92 p 11*

[Report by K.B.: "Battle Against Impasses in Setting Up Telephone Networks in Eastern Germany; More Than a Million Applications for Lines Unprocessed"]

[Text] Bonn, 27 Jan—The investment targets for setting up a modern telephone network in the new laender were largely met during the first year following unification. This interim report was presented by the Federal Post Office-Telekom on Monday in Bonn. However, Board Chairman Helmut Ricke and the board's eastern coordinator, Wilhelm Paellmann, also submitted a list of continuing impasses. They gave assurances that, despite all sorts of obstacles, it was possible to eliminate, with the help of investments amounting to 9 billion German marks [DM], a large number of weak points this year. For business customers in urgent need of a telephone, temporary lines were installed.

As for telephone charges, Ricke said that steps must be taken to deal with the annual DM700 million deficit for pay phones and information services. Many related ideas are under consideration, but no decisions have been made. Most assuredly, pay phone charges will not be raised this year, he added. As for information services,

the benefits for Telekom customers must be improved so convincingly that they will accept higher telephone fees.

Ricke pointed out that eastern German technology is so antiquated that it must be replaced. Some 40 percent of the telephone exchanges are scheduled to be modernized by year's end; by mid-1993, all of them will be equipped with digital technology, Paellmann promised. A total of 2,100 km of glass fiber are to be installed for the expansion of the nationwide telephone network. Meanwhile, phoning from east to west and vice versa, Ricke noted, is "almost problem-free." However, accelerated efforts must be made to deal with the threatening danger that antiquated local networks can no longer meet the dramatically growing telephone needs.

Ricke admits that the run on new telephone lines has turned out to be greater than estimated by Telekom. One of the reasons was also the large number of newly established small businesses. Telekom inherited from the GDR postal system some 1.5 million unfilled applications. The oldest order was placed 28 years ago. It is by no means clear how many customers will continue their application, according to Ricke. Telekom could not fulfil its pledge that every business customer would have a telephone by the end of 1992.

No mention was made of the number of business customers who do not have a telephone. To the extent that they submitted their application by the first quarter of 1991, they can now, under special conditions, call from their car phones. In undersupplied areas, 50,000 "wireless connections" will be installed for industry in the coming months, Ricke noted, in order to provide within a short time, service to those business customers who used to be cut off from the world of the telephone. This system will have its world premiere in the new laender.

In 1992 as well, the telephone companies will install 200,000 completed telephone connections. So far, 453,000 new lines have been put in in eastern Germany. Discontinuation of connections made it possible to install new telephone lines for 550,000 customers, according to Ricke.

Both Ricke and Paellmann explained that modernization is significantly hampered by, among other things, continued legal uncertainties and administrative-technological shortcomings. Real estate at proper sites for investments is lacking. Permit procedures are being delayed. Additional requirements make it difficult to find suitable locations for telephone booths in urban centers with historic cityscapes, such as in Berlin, Leipzig and Dresden. Even power lines to public telephone booths are lacking, he noted. Pay and card phones are of particular importance because of the lack of telephones in eastern German private homes. Meanwhile, vandalism has become more serious than in western Germany. In 1991, Telekom installed almost 12,000 new telephone booths in the new laender. More than 4,000 booths were vandalized or willfully

destroyed. Some of the equipment had to be repaired repeatedly, so that about 7,000 pay phones had to be replaced.

## PORUGAL

### Ericsson To Supply National GSM Mobile Phone System

*92WS0352O Chichester INTERNATIONAL TELECOMMUNICATIONS INTELLIGENCE in English 20 Jan 92 p 3*

[Text] Ericsson has been selected as sole supplier of the infrastructure for the GSM [Special Mobile Group] digital mobile telephone network to be operated by Telecel Communicacoens Pessoals, SA in Portugal.

Ericsson said the contract, which could be worth up to \$150 million, covers the supply of all equipment for the complete initial system and future extensions.

Telecel's system is planned to serve up to 150,000 subscribers and cover more than 85 percent of Portugal by 1996. The system is expected to begin commercial service in October this year.

Telecel obtained the licence to operate a private GSM system in Portugal in October 1991. Partners in the consortium are Pacific Telesis of the US, Espirito Santo Group, Amorim Group, Centrel, EFACEC and LCC Corporation. (see ITI issue 306).

Ericsson is now supplying 11 of the 14 countries that have selected a supplier of GSM equipment. This order is also a strategic breakthrough for Ericsson in that Portugal becomes the 84th national market for the company's AXE switch.

## SPAIN

### Hispasat Communications Satellite Discussed

*92WT0107A Madrid CAMBIO 16 in Spanish 3 Feb 92 pp 84-85*

[Article by special correspondent J. Montoya: "Spain Now Has a Satellite"]

[Text] Hispasat, to be launched in August, will bring Spain close to the countries most advanced in telecommunications.

Spain will soon join the group of countries with their own satellites. Hispasat, the communications satellite that will link America and the Iberian Peninsula, is to be launched this coming August. Despite the speed with which the Spanish officials in charge of the project claim this to have been achieved, it will not arrive in time to transmit to the world the events for which Spain will be the host country during 1992. Nevertheless, the officials

still stress the fact that Hispasat is just another project on the path to modernization that the country has undertaken this year.

After the launching, which will take place from Kourou, in French Guyana, all types of functional tests will be conducted, as well as maneuvers for putting it in the pertinent geostationary orbit in which it will perform its work. Hence, its entry into operation is set for January 1993.

"The gestation period has been incredibly short, as compared with what is usually required in such projects," admits Pedro Pinto, director of Hispasat programs. The period planned for construction, 33 months, has necessitated the creation of a satellite that will bear a strong resemblance to some already in existence. The first time target established was that it be ready for the opening of the Universal Exposition in Sevilla.

Although this could not be maintained, the time spent on construction has proved very short, as compared with that for others in the past. And this has occurred without bypassing the technical requirements established by Spain. The country wanted to have a communications system of its own that would connect it to the American continent 500 years after the discovery.

Nevertheless, the degree of innovation attained with Hispasat is very high. It is not without reason that this is the first satellite that will transmit to both sides of the Atlantic. Pinto claims, "There is a large design component. Of the 101 units of equipment that make up Hispasat, 33 are completely new or have undergone highly significant modifications."

The Spanish project, developed by the French firm Matra Marconi Space, is designed with two other satellites. Both will be in orbit simultaneously. (The second will be put into operation in early 1993.) Meanwhile, a third will be on earth, ready for launching, to replace either of the other two if one should stop operating or undergo technical problems.

Hispasat is a multission satellite, prepared to serve five purposes during its 10 years of useful life: transport of television and radio images and associated signals; support for national defense communications; official network channels; data network channels, restoration of links, rural telephony, and point-to-point links; and television channels for the Spanish-speaking community in America.

#### Commercial Benefits

The share of Spanish technology in the construction amounts to 30 percent of the satellite components. The leading national enterprises have been commissioned to construct these components. CASA [Spanish Aircraft Manufacturing, Inc.], INTA [National Institute for Aerospace Technology], CESELSA [expansion unknown], and INISEL [National Electronics and Systems Enterprise, Inc.] have been some of them.

The possibility of Spanish technicians' participating directly in the project is one of the most important benefits this project will offer to Spanish research. Hispasat is merely a first approach by the Spanish industry to the world of satellite communications. After this project, more are planned to come. Therefore, the gearing of Spanish technicians to the new communication technologies will bring major benefits.

As for the others, the purely commercial ones, after the large investment made (56 billion pesetas), those in charge of Hispasat hope to achieve considerable income return. This was admitted by Jose Borrell during his visit to the Matra facilities: "The return on this investment of 56 billion lends it great profitability; and it is expected to accrue some 50 billion pesetas in profits during the satellite's useful life." Also contingent on the accrual of those profits will be the impetus that is received by the projects for the construction of other satellites currently being studied.

The tracking will be done in a control center constructed expressly for this occasion at Arganda del Rey, Madrid. From there, a weekly correction will be made in its orbit, and, at the appropriate time, when its useful period ends, it will be sent to a kind of space graveyard: an orbit farther removed from earth than the one in which it will move during its 10 years of operation.

Hispasat's entry into use will also require the regulation of this type of communications by law. The legislation, which must be ready when the satellite goes into operation, will, as Borrell confirmed, regulate "transmission based on the three new technological procedures: television via satellite, television via cable, and television via low-power ground broadcasting, as the transmissions from the local broadcasting stations are called."

The race for communications via satellite has begun in Spain, and it could not be otherwise during 1992. Other projects that were already under way—such as the micro-satellites, to be developed entirely with the nation's own technology—are continuing their progress. Although their viability may not depend on Hispasat, the latter's success will, to a large extent, be linked to the future of the former.

#### SWEDEN

#### Telenokia CEO on Development Plan for Mobile Phones

92WT0088B Stockholm DAGENS NYHETER  
in Swedish 10 Jan 92 p 26

[Article by Jan Nylander: "Nokia Hedges Its Bets"]

[Text] Nokia, Europe's largest manufacturer of mobile phones, is investing in expansion.

"We intend to move up on the world competition next year," said Jorma Ollila, CEO for Nokia Mobile Phones, at a press conference last Thursday.

He visited Stockholm in order to be present at the unveiling of the group's new pocket telephone for the global market.

A couple of years ago Nokia experienced problems with the development of new pocket phones, as some key employees defected to start their own companies.

But Nokia is coming back and according to Jorma Ollila, during 1991 the Finnish technology group recovered some of its market share from other manufacturers.

"We competed earlier with some Japanese companies for the position as the second largest manufacturer of mobile phones, but with fourteen percent of the world market we are now clearly in second place after Motorola."

Jorma Ollila showed estimates which indicate that 5.5 million mobile phones were sold world-wide in 1991, compared to 4.9 in 1990.

"The decreased growth rate is due to the economic situation, with the recession in the United States and Great Britain having the greatest impact," claimed Ollila.

Nokia is hoping that sales of mobile phones will gain momentum again this year. Projections indicate global sales of 6.8 million telephone units.

"It will be a few years before the new digital technology breaks through. According to our calculations, the sales of digital pocket phones will not surpass the current volume of analog phone sales until 1994," stated Ollila.

This is also the reason why Nokia has taken the risk of developing a totally new pocket phone based on old analog technology.

Nokia's pocket phone is a little heavier than today's most advanced models. But by bundling the pocket phone with an ultra-light charger, which Nokia developed itself, they can brag that they are selling "the world's lightest travel phone."

#### **Telecommunications Agency Cutting Investment**

##### **Privatization Plan Faulted**

92WT0090A Stockholm DAGENS NYHETER  
in Swedish 10 Jan 92 p 26

[Article by Christer Nilsson: "Don't Sell the Telecommunications Agency"]

[Text] The government's plans to turn the Telecommunications Agency into a private company are meeting with harsh criticism. Union organizations are expressing their firm disapproval and the same evaluation is made by business consultant Jack Keavney.

"Politicians often take a wrong turn when ideology instead of economic realities are allowed to prevail. With

private interests in the telecommunications sector prices will go up and service will deteriorate," Jack Keavney tells DAGENS NYHETER.

He works as a consultant for the purpose of quality and control in company management. His base is his home city of Sydney, Australia. He has been studying deregulation in the telecommunications market for many years.

For the moment he is in Sweden, and his advice to the Swedish Government and the head of the Telecommunications Agency, Tony Hagstrom, is:

"Keep what you have. Sweden is a leader in the world market as regards quality and accessibility. The rates are also the second lowest in the world."

He is very well aware that there is a lot of money to be made when globalizing telecommunications services. But private alliances operated solely for profit are a threat to the private customers, and the risk is evident that rates will become more unfair. Small companies without any responsibility for social service skim the cream off the top, in his opinion.

"There is a glorification of the market, a sense that it will solve all problems. Now people are going too far, and without asking any questions they accept the myths about deregulation instead of making a correct analysis. The results of a large number of countries who have liberalized telecommunications have a deterrent effect," says Jack Keavney.

The entire communications sector is affected by the government's offensive against state activity contained in the draft budget that will be presented today. Market adjustment and deregulation are the political goals. The public service corporations are being transformed into stock corporations without any special responsibility for society.

Both the Government Workers' Union and the Federation of Civil Servants warn against this development.

#### **Modernization Slowed**

92WT0090B Stockholm SVENSKA DAGBLADET  
in Swedish 25 Jan 92 p C1

[Article by Henrik Ennart and Tommy Oberg: "Telecommunications Agency Cuts Billions"]

[Text] The Telecommunications Agency is cutting back its investments by 2 billion kronor to 8 billion during 1992.

At the same time negotiations are getting underway regarding notices to end furloughs of 3,900 employees, one-third of which are directly related to the reduced investments. Real layoffs are not excluded.

At Teli in Nynashamn, the equivalent of 300 persons will be temporarily dismissed when the factory closes its doors for the year as early as June.

The decision immediately met with harsh criticism from Curt Persson, chairman of the Government Workers' Union [SF].

"The head of the Telecommunications Agency, Tony Hagstrom, is using the personnel as hostages in his rate battle with parliament," says Curt Persson to NARINGSLIV. "The communications minister must put an immediate stop to this political game."

SF registered its reservations. The union is of the opinion that it is not yet possible to judge the consequences of the postponed rate decision, particularly since the government right now is studying an alternative rate structure.

When the MBL [Workers Right to Participate in Management] negotiations begin on Thursday, the SF will demand that a wage earner consultant should be employed.

#### 7,400 Involved

Altogether, 7,400 Telecommunications Agency employees are now affected by notices and other measures, if last year's package of measures are included.

The subscribers will notice yesterday's decision from the fact that 200,000 households will not get access to the AXE system's Plus services this year. Savings are made throughout the entire country, but chiefly in Norrland, Varmland, Dalarna and Orebro province.

At the press conference which was held right after the board meeting on Friday, Tony Hagstrom said that he deeply regretted the cuts and hoped that parliament would come to its senses. The majority of the investments can still be implemented, if parliament quickly gives the green light for a rate increase.

The parliamentary decision, which was forced through by the Social Democrats, the Left Party and New Democracy, was arrived at after Stockholm residents and retirees, above all, reacted strongly to rates going up for private customers, while decreasing for companies.

Could the Telecommunications Agency imagine adjusting the rate change so that it does not hit private customers so hard?

"This orientation toward a shifting of the rates is completely necessary and cannot be altered, but the details could be discussed," Tony Hagstrom says.

"Today the private customers and Stockholm residents are being subsidized by the corporate customers. This is untenable for us, since we are encountering the fiercest competition in the business market."

Tony Hagstrom firmly denied that excessive increases had been made in order to increase pressure on the politicians.

Behind the decision is also parliament's decision last summer for the Telecommunications Agency to submit 5.2 billion kronor to the state treasury as a one-time payment.

According to Hagstrom, these decisions have created uncertainty regarding future income, something which has coincided with the fact that the economy is hitting the Telecommunications Agency harder than anticipated.

From having increased its sales volume by 9.1 percent during the first quarter of 1991, growth fell to 1.1 percent during the fourth quarter.

In the long run, the technical development also means that the need for personnel will decrease.

#### Fewer Cars and Computers

The cuts will mean that the Telecommunications Agency's invoiced sales will decline by approximately 350 million kronor. How this will affect the subcontractors has not yet been studied. It is completely clear, however, that 600 million kronor must be saved in reduced purchases of cars and computers, among other things.

But for the most part—1.4 billion kronor—the savings are accomplished by means of reduced investments in the telephone network itself. Investments in new AXE stations will be cut back by 25 percent, which affects a number of places from Motala, Karlshamn and Kramfors to Saltsjobaden and Vasterhaninge.

Two thousand kilometers of fiberoptic cable will never be dug into the ground, which reduces the opportunity to fax with good quality over the entire country.

To the question of why the Telecommunications Agency is letting the sparsely inhabited regions instead of the major cities be left behind, Tony Hagstrom replies that the goal has been to prevent this.

"But now that we are forced to cut, we must prioritize those modernizations which pay."

"The measures we are now forced to undertake do not benefit anyone. If the trend continues, it will not be long before we will experience a shortage of telephone numbers. I hope that parliament did not understand what it did," says Tony Hagstrom.

## TURKEY

#### Holding Companies Vie To Enter TV Broadcasting

NC1602061692 Istanbul TURKIYE in Turkish  
4 Feb 92 p 17

[Report by Sadi Ozdemir]

[Excerpts] Istanbul—Parallel to developments in the world's mass communications, our country's private

television broadcasters, who began operating clandestinely, are now active. [passage omitted]

### Holding Companies Lead the Way

Holding companies were the first to move into this market because private television broadcasting requires a lot of capital. The minimum requirement of 50 billion Turkish lira required to set up a television company also necessitates foreign partnerships.

Teleon began broadcasting at the beginning of February as planned after overcoming the last legal hurdles. The fight that started with Ahmet Ozal's claim that since he is a partner of Magic Box company he must also be a partner in Teleon is continuing, however, and is threatening the partnership of the Uzan family and Ahmet Ozal. The court battle is continuing fiercely.

Suzer Holding company is yet another business working to set up a private television station and has taken important steps in this direction. [passage omitted] Suzer Holding's station is planning to broadcast 24 hours a day from France, giving priority to French productions.

Koc Holding-Time Warner Bros partnership some time ago applied to hire the third channel of TRT. This request was denied because the legal arrangements had not yet been completed. Until this application was made nothing was heard about this partnership, which shows it prefers to work silently.

Sabanci Holding entered the field for private television broadcasting after the move by the rival Koc company. It is reported that Sakip Sabanci held a private meeting with Prime Minister Suleyman Demirel on renting a channel from TRT.

Flash TV was established by Omer Goktug. It is centered in Bursa and intends to broadcast to the Marmara region.

In addition to the above, the names of the following are also mentioned in connection with private television broadcasting. Has Holding is operating under Bulent Ozturkmen and Aydogan Semizer. Ceylan Holding has already set up its advertisement and broadcasting company. Ulusal Radyo Televizyon (URT) [National Radio Television] is operating under Turker Inanoglu and Emre Dagdeviren. Currently URT is only producing programs. The Tatlicilar Group is developing projects under Yilmaz Karakoyunlu.

### TURKIYE GAZETESI RADYO TELEVIZYONU (TGRT)

Our newspaper's organization, TGRT [The TURKIYE Newspaper Radio Television], has won over the Turkish people with its work and is getting ready for television broadcasting. TGRT Director General Rahim Er said there are plans to include studios and other facilities at

the TURKIYE newspaper complex being built in Yenibosna. Rahim Er also noted that TGRT has officially applied to TRT to rent a channel. [passage omitted]

### Private Companies Prepare To Shake Up Broadcasting

*NC0602161392 Ankara TURKISH DAILY NEWS  
in English 3 Feb 92 p 5*

[Article by Metin Corabatir]

[Text] Ankara—As the government prepares to lift the constitutional obstacles from private broadcasting in Turkey, the giants of the Turkish press have already taken their positions for the upcoming competition for a bigger share of the TV cake.

The merger of the SABAH-HURRIYET joint venture with the financial sector's colorful member Erol Aksoy this week emerged as the most promising private competitor, sources believe. Government officials are determined to change the Constitution to pave the way for private radio and TV broadcasting inside Turkey, by mid March.

And because of the fact that the main opposition party in parliament, ANAP [Motherland Party], is also in favor of such a constitutional amendment, observers believe that the people of Turkey will have more freedom to scan the channels, by that time. Actually it was ANAP, in power until the elections in October, who created the opportunity of having an alternative to the six channels of the state-run TRT [Television].

But it happened in rather a strange way. The ANAP government did not have enough parliamentary backing to amend the Constitution, but it gave full support to the first private channel, Star-1, partly because of political reasons.

Star-1 has chosen to broadcast from its studios in Germany via satellite, thus escaping the monopoly given by the Constitution to TRT. Star-1 at first gave prominence to soap operas and music clips, but later understood the importance of news.

It took two years for Star-1 to establish at least one camera in Ankara, the capital city. When it started its news service, however, it became the target of opposition because of its subjective reporting.

What Star-1 has done since the elections is to give up its ties with President Turgut Ozal's family in order to establish a good rapport with the new government.

Star-1's company, the Magic Box has also started its test broadcasts for its second channel, Tele-10 to be ready by March. Both SABAH and HURRIYET, the two leading daily papers of Turkey have been preparing themselves for TV for a long time.

They were hiring famous names from Turkish press and stars of TRT such as ugur Dundar. Only recently they

decided to join forces. Almost at the same time, Erol Aksoy, the owner of Iktisat Bank, has been attempting to run another channel.

He asked Nuri Colakoglu, an experienced Turkish journalist with the BBC's Turkish Service who also worked for MILLIYET and later became adviser to former TRT General Director, Cem Duna, to organize the channel. Guneri Civaoglu, another star from the Turkish press, left his position as front page columnist for SABAH and started working for Aksoy's channel, Show TV.

The Aksoy group has also stolen good technicians from TRT, the state-owned channel. The famous director Musa Cozen was among them. Show TV also asked famous new anchormen [as published] of TRT, Zafer Kiraz, to join it, but it is said that Kiraz turned down a 20 million Turkish lira monthly salary offer.

However the announcement of the merger of SABAH-HURRIYET TV with Show-TV has shaken the market. Another surprise from this big group was Mehmet Ali Birand's decision to work for it.

It is said that Birand, the producer of 32nd Day, a Turkish version of BBC's Panorama, had first asked the SABAH group to be a partner of the company.

Mehmet Ali Birand is in legal troubles because of his alleged conduct while he was producing his program for TRT.

It is expected that with the constitutional amendment, TRT will have a new structure more independent of party politics. "All these developments are good for democracy," said an observer.

"Since the start of television in Turkey in the 1970's, it has always been under political influences. We hope its time for genuine TV news broadcast."

#### Communications Minister on TURKSAT Project

NC0303151092 Istanbul MILLIYET in Turkish  
26 Feb 92 p 17

[Report by Ercument Isleyen: "Television Telecasts to the Turkic Republics"]

[Text] Minister of Communications Yasar Topcu has disclosed that as of April Turkey will beam television programs to the Turkic republics via commercial satellite channels. Noting that Turkish Radio and Television [TRT] TV-1 programs will be beamed to the Turkic republics, Topcu said that a mobile ground control unit and technicians are already in Azerbaijan.

Topcu also revealed that Turkey has not abandoned the TURKSAT satellite project, regardless of an inquiry on high-ranking Post, Telephone, and Telegraph Administration [PTT] officials. He asserted that the first Turkish satellite will be launched and placed in orbit at the end of 1993.

Topcu told MILLIYET that the three satellite television channels Turkey had leased in the past, and which have not been used, will beam television programs to the Turkic republics. Noting that he had already instructed the PTT administration, he said that Turkey would fund the telecasts and telephone communication links between Turkey and the new republics, adding that Ankara had already dispatched a mobile ground control station to Azerbaijan. He noted: "We have been waiting for one month but Iran has refused entry to the vehicles which are carrying the ground control unit. The confusion in Georgia means safe travel through the Caucasus region could not be guaranteed. The vehicles and our technical personnel have been sent to the Central Asian republics through Azerbaijan."

Topcu said that Turkey will establish automatic telephone links with six republics, to which it will beam its television programs through the ground control units and the satellite channels it has leased by the end of April. He added: "We have signed agreements to cooperate with the Turkic republics. We will link the Turkic republics with other countries by telephone through Turkey, and TRT TV-1 programs, all or a selected few, will be beamed to them."

Topcu said that officials found everything in order with the French firm's handling of the TURKSAT contract, but that irregularities in the work carried out by high-ranking PTT officials were important enough to warrant a lawsuit. He said: "If there is any fault on the part of the French firm during the trial, that can be assessed separately, which is why the TURKSAT project has not been canceled. Satellites will continue to be manufactured. The agreement's provisions will be studied and the satellite will be placed in orbit at the end of 1993. It will accommodate 22 channels. The operational life of the TURKSAT satellite is limited and frequency adjustments will often be necessary, further shortening its life. The satellite can only be used for an estimated 12 or 13 years. Under present conditions, we will be able to use only 14 of the 22 channels, leaving around a third of the satellite unused in orbit. That is the main reason for the TURKSAT argument. The government has done the work for all the channels to be used during the satellite's life and has done what it can to develop Turkey's telecommunication systems to align them with the satellite. Our objective is that none of the TURKSAT channels will remain unused."

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